

CALL NO. <u>103</u>
CONTRACT ID. <u>161210</u>
ROCKCASTLE COUNTY
FED/STATE PROJECT NUMBER NHPP IM 0752 (091)
DESCRIPTION <u>1-75</u> (ROCKCASTLE COUNTY)
WORK TYPE <u>ASPHALT REHAB INTERSTATE/PARKWAY</u>
PRIMARY COMPLETION DATE <u>7/1/2016</u>

LETTING DATE: February 19,2016

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME February 19,2016. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

DBE CERTIFICATION REQUIRED - 11%

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

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PART I SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 08

CONTRACT ID - 161210 NHPP IM 0752 (091) COUNTY - ROCKCASTLE

PCN - DE10200751610 NHPP IM 0752 (091)

I-75 SOUTHBOUND (ROCKCASTLE COUNTY) (MP 50.711) MILL AND THIN ASPHALT OVERLAY ON SOUTHBOUND I-75 FROM THE LAUREL/ROCKCASTLE COUNTY LINE TO 1.283 MI NORTH OF THE LAUREL/ROCKCASTLE COUNTYLINE (MP 52.050), A DISTANCE OF 01.34 MILES.ASPHALT REHAB INTERSTATE/PARKWAY SYP NO. 08-02022.00.

GEOGRAPHIC COORDINATES LATITUDE 37:15:12.00 LONGITUDE 84:14:53.00

COMPLETION DATE(S):

COMPLETED BY 07/01/2016 APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/construction-procurement)

The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor is advised that the Underground Facility Damage Protection Act of 1994, became law January 1, 1995. It is the contractor's responsibility to determine the impact of the act regarding this project, and take all steps necessary to be in compliance with the provision of the act.

SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS

Contrary to the Standard Drawings (2012 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

<u>REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN</u> <u>ENTITY</u>

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by KRS 14A.9-010 to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under KRS 14A.9-030 unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception. Foreign entity is defined within KRS 14A.1-070.

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at https://secure.kentucky.gov/sos/ftbr/welcome.aspx.

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to kytc.projectquestions@ky.gov. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (www.transportation.ky.gov/contract). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer.

Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004. (See attachment)

10/29/12



Steven L. Beshear Governor Finance and Administration Cabinet
OFFICE OF THE SECRETARY

Room 383, Capitol Annex 702 Capital Avenue Frankfort, KY 40601-3462 (502) 564-4240 Fax (502) 564-6785 **Lori H. Flanery** Secretary

SECRETARY'S ORDER 11-004

FINANCE AND ADMINISTRATION CABINET

Vendor Document Disclosure

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary to conduct a review of the records of a private vendor that holds a contract to provide goods and/or services to the Commonwealth; and

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary during the course of an audit, investigation or any other inquiry by an Executive Branch agency that involves the review of documents; and

WHEREAS, KRS 42.014 and KRS 12.270 authorizes the Secretary of the Finance and Administration Cabinet to establish the internal organization and assignment of functions which are not established by statute relating to the Finance and Administration Cabinet; further, KRS Chapter 45A.050 and 45A.230 authorizes the Secretary of the Finance and Administration Cabinet to procure, manage and control all supplies and services that are procured by the Commonwealth and to intervene in controversies among vendors and state agencies; and

NOW, THEREFORE, pursuant to the authority vested in me by KRS 42.014, KRS 12.270, KRS 45A.050, and 45A.230, I, Lori H. Flanery, Secretary of the Finance and Administration Cabinet, do hereby order and direct the following:

- I. Upon the request of an Executive Branch agency, the Finance and Administration Cabinet ("FAC") shall formally review any dispute arising where the agency has requested documents from a private vendor that holds a state contract and the vendor has refused access to said documents under a claim that said documents are not directly pertinent or relevant to the agency's inquiry upon which the document request was predicated.
- II. Upon the request of an Executive Branch agency, the FAC shall formally review any situation where the agency has requested documents that the agency deems necessary to



- conduct audits, investigations or any other formal inquiry where a dispute has arisen as to what documents are necessary to conclude the inquiry.
- III. Upon receipt of a request by a state agency pursuant to Sections I & II, the FAC shall consider the request from the Executive Branch agency and the position of the vendor or party opposing the disclosure of the documents, applying any and all relevant law to the facts and circumstances of the matter in controversy. After FAC's review is complete, FAC shall issue a Determination which sets out FAC's position as to what documents and/or records, if any, should be disclosed to the requesting agency. The Determination shall be issued within 30 days of receipt of the request from the agency. This time period may be extended for good cause.
- IV. If the Determination concludes that documents are being wrongfully withheld by the private vendor or other party opposing the disclosure from the state agency, the private vendor shall immediately comply with the FAC's Determination. Should the private vendor or other party refuse to comply with FAC's Determination, then the FAC, in concert with the requesting agency, shall effectuate any and all options that it possesses to obtain the documents in question, including, but not limited to, jointly initiating an action in the appropriate court for relief.
- V. Any provisions of any prior Order that conflicts with the provisions of this Order shall be deemed null and void.

FEDERAL CONTRACT NOTES

The Kentucky Department of Highways, in accordance with the Regulations of the United States Department of Transportation 23 CFR 635.112 (h), hereby notifies all bidders that failure by a bidder to comply with all applicable sections of the current Kentucky Standard Specifications, including, but not limited to the following, may result in a bid not being considered responsive and thus not eligible to be considered for award:

102.02 Current Capacity Rating 102.10 Delivery of Proposals

102.8 Irregular Proposals 102.14 Disqualification of Bidders

102.9 Proposal Guaranty

CIVIL RIGHTS ACT OF 1964

The Kentucky Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Federal Department of Transportation (49 C.F.R., Part 21), issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin.

NOTICE TO ALL BIDDERS

To report bid rigging activities call: 1-800-424-9071.

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

SECOND TIER SUBCONTRACTS

Second Tier subcontracts on federally assisted projects shall be permitted. However, in the case of DBE's, second tier subcontracts will only be permitted where the other subcontractor is also a DBE. All second tier subcontracts shall have the consent of both the Contractor and the Engineer.

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

It is the policy of the Kentucky Transportation Cabinet ("the Cabinet") that Disadvantaged Business Enterprises ("DBE") shall have the opportunity to participate in the performance of highway construction projects financed in whole or in part by Federal Funds in order to create a level playing field for all businesses who wish to contract with the Cabinet. To that end, the Cabinet will comply with the regulations found in 49 CFR Part 26, and the definitions and requirements contained therein shall be adopted as if set out verbatim herein.

The Cabinet, contractors, subcontractors, and sub-recipients shall not discriminate on the basis of race, color, national origin, or sex in the performance of work performed pursuant to Cabinet contracts. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted highway construction projects. The contractor will include this provision in all its subcontracts and supply agreements pertaining to contracts with the Cabinet.

Failure by the contractor to carry out these requirements is a material breach of its contract with the Cabinet, which may result in the termination of the contract or such other remedy as the Cabinet deems necessary.

DBE GOAL

The Disadvantaged Business Enterprise (DBE) goal established for this contract, as listed on the front page of the proposal, is the percentage of the total value of the contract.

The contractor shall exercise all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises participate in a least the percent of the contract as set forth above as goals for this contract.

OBLIGATION OF CONTRACTORS

Each contractor prequalified to perform work on Cabinet projects shall designate and make known to the Cabinet a liaison officer who is assigned the responsibility of effectively administering and promoting an active program for utilization of DBEs.

If a formal goal has not been designated for the contract, all contractors are encouraged to consider DBEs for subcontract work as well as for the supply of material and services needed to perform this work.

Contractors are encouraged to use the services of banks owned and controlled by minorities and women.

CERTIFICATION OF CONTRACT GOAL

Contractors shall include the following certification in bids for projects for which a DBE goal has been established. BIDS SUBMITTED WHICH DO NOT INCLUDE CERTIFICATION OF DBE PARTICIPATION WILL NOT BE ACCEPTED. These bids will not be considered for award by the Cabinet and they will be returned to the bidder.

"The bidder certifies that it has secured participation by Disadvantaged Business Enterprises ("DBE") in the amount of percent of the total value of this contract and that the DBE participation is in compliance with the requirements of 49 CFR 26 and the policies of the Kentucky Transportation Cabinet pertaining to the DBE Program."

The certification statement is located in the electronic bid file. All contractors must certify their DBE participation on that page. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted.

DBE PARTICIPATION PLAN

Lowest responsive bidders must submit the *DBE Plan/Subcontractor Request*, form TC 14-35 DBE, within 7 days of the letting. This is necessary before the Awards Committee will review and make a recommendation. The project will not be considered for award prior to submission and approval of the apparent low bidder's DBE Plan/Subcontractor Request.

The DBE Participation Plan shall include the following:

- Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
- Description of the work each is to perform including the work item, unit, quantity, unit price and total amount of the work to be performed by the individual DBE. The Project Code Number (PCN), Category Number, and the Project Line Number can be found in the "material listing" on the Construction Procurement website under the specific letting;
- 3 The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows; a) If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
 - The entire expenditure paid to a DBE manufacturer;
 - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to

- the public, maintain an inventory and own and operate distribution equipment; and
- The amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.
- b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
- c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
- Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
- Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

Contractors must submit the signed subcontract between the contractor and the DBE contractor, the DBE's certificate of insurance, and an affidavit for bidders, offerors, and contractors from the DBE to the Division of Construction Procurement. The affidavit can be found on the Construction Procurement website. If the DBE is a supplier of materials for the project, a signed purchase order and an affidavit for bidders, offerors, and contractors must be submitted to the Division of Construction Procurement.

Changes to DBE Participation Plans must be approved by the Cabinet. The Cabinet may consider extenuating circumstances including, but not limited to, changes in the nature or scope of the project, the inability or unwillingness of a DBE to perform the work in accordance with the bid, and/or other circumstances beyond the control of the prime contractor.

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set and nine (9) copies of this information must be received in the

office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Cabinet considers in judging good faith efforts. This documentation may include written subcontractors' quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

The Good Faith Effort Package shall include, but may not be limited to information showing evidence of the following:

- 1 Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
- Whether the bidder provided solicitations through all reasonable and available means;
- Whether the bidder provided written notice to all DBEs listed in the DBE directory at the time of the letting who are prequalified in the areas of work that the bidder will be subcontracting;
- Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainly whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the DBE Liaison in the Office of Minority Affairs to give notification of the bidder's inability to get DBE quotes;
- Whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise perform these work items with its own forces;
- Whether the bidder provided interested DBEs with adequate and timely information about the plans, specifications, and requirements of the contract;
- Whether the bidder negotiated in good faith with interested DBEs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached;
- Whether quotations were received from interested DBE firms but were rejected as unacceptable without sound reasons why the quotations were considered unacceptable. The fact that the DBE firm's quotation for the work is not the lowest quotation received will not in itself be considered as a sound reason for rejecting the quotation as unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a DBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy DBE goals;
- 9 Whether the bidder specifically negotiated with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be subcontracted includes potential DBE participation;
- Whether the bidder made any efforts and/or offered assistance to interested DBEs in obtaining the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the

work requirements of the bid proposal; and

Any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include DBE participation.

FAILURE TO MEET GOOD FAITH REQUIREMENT

Where the apparent lowest responsive bidder fails to submit sufficient participation by DBE firms to meet the contract goal and upon a determination by the Good Faith Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the bidder will be offered the opportunity to meet in person for administrative reconsideration. The bidder will be notified of the Committee's decision within 24 hours of its decision. The bidder will have 24 hours to request reconsideration of the Committee's decision. The reconsideration meeting will be held within two days of the receipt of a request by the bidder for reconsideration.

The request for reconsideration will be heard by the Office of the Secretary. The bidder will have the opportunity to present written documentation or argument concerning the issue of whether it met the goal or made an adequate good faith effort. The bidder will receive a written decision on the reconsideration explaining the basis for the finding that the bidder did or did not meet the goal or made adequate Good Faith efforts to do so.

The result of the reconsideration process is not administratively appealable to the Cabinet or to the United States Department of Transportation.

The Cabinet reserves the right to award the contract to the next lowest responsive bidder or to rebid the contract in the event that the contract is not awarded to the low bidder as the result of a failure to meet the good faith requirement.

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

Failure by the prime contractor to fulfill the DBE requirements of a project under contract or to demonstrate good faith efforts to meet the goal constitutes a breach of contract. When this occurs, the Cabinet will hold the prime contractor accountable, as would be the case with all other contract provisions. Therefore, the contractor's failure to carry our the DBE contract requirements shall constitute a breach of contract and as such the Cabinet reserves the right to exercise all administrative remedies at its disposal including, but not limited to the following:

- Disallow credit toward the DBE goal;
- Withholding progress payments;
- Withholding payment to the prime in an amount equal to the unmet portion of the contract goal; and/or
- Termination of the contract.

PROMPT PAYMENT

The prime contractor will be required to pay the DBE within seven (7) working days after he or she has received payment from the Kentucky Transportation Cabinet for work performed or materials furnished.

CONTRACTOR REPORTING

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to submit certified reports on monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. These reports must be submitted within 14 days of payment made to the DBE contractor.

Payment information that needs to be reported includes date the payment is sent to the DBE, check number, Contract ID, amount of payment and the check date. Before Final Payment is made on this contract, the Prime Contractor will certify that all payments were made to the DBE subcontractor and/or DBE suppliers.

The Prime Contractor should supply the payment information at the time the DBE is compensated for their work. Form to use is located at: http://transportation.ky.gov/Construction/Pages/Subcontracts.aspx

The prime contractor should notify the KYTC Office of Civil Rights and Small Business Development seven (7) days prior to DBE contractors commencing work on the project. The contact is Melvin Bynes and the telephone number is (502) 564-3601.

Photocopied payments and completed form to be submitted to: Office of Civil Rights and Small Business Development 6 Floor West 200 Mero Street Frankfort, KY 40622

DEFAULT OR DECERTIFICATION OF THE DBE

If the DBE subcontractor or supplier is decertified or defaults in the performance of its work, and the overall goal cannot be credited for the uncompleted work, the prime contractor may utilize a substitute DBE or elect to fulfill the DBE goal with another DBE on a different work item. If after exerting good faith effort in accordance with the Cabinet's Good Faith Effort policies and procedures, the prime contractor is unable to replace the DBE, then the unmet portion of the goal may be waived at the discretion of the Cabinet.

04/29/2015

<u>LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC – CARGO PREFERENCE ACT (CPA).</u>

(REV 12-17-15) (1-16)

SECTION 7 is expanded by the following new Article:

102.10 <u>Cargo Preference Act – Use of United States-flag vessels.</u>

Pursuant to Title 46CFR Part 381, the Contractor agrees

- To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 1 of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

ROCKCASTLE COUNTY NHPP IM 0752 (091)

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ASPHALT MIXTURE

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

DGA BASE

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

DGA BASE FOR SHOULDERS

Unless otherwise noted, the Department estimates the rate of application for DGA Base for Shoulders to be 115 lbs/sy per inch of depth. The Department will not measure necessary grading and/or shaping of existing shoulders prior to placing of DGA Base, but shall be incidental to the Contract unit price per ton for DGA Base.

Accept payment at the Contract unit price per ton as full compensation for all labor, materials, equipment, and incidentals for grading and/or shaping of existing shoulders and furnishing, placing, and compacting the DGA Base.

INCIDENTAL SURFACING

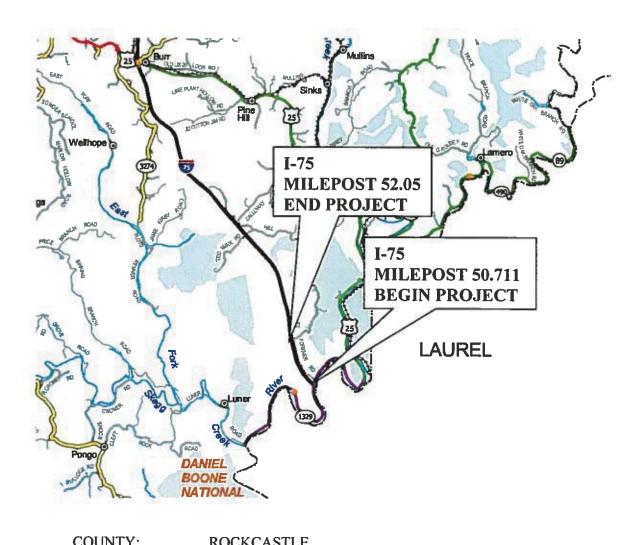
The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

FUEL AND ASPHALT PAY ADJUSTMENT

The Department has included the Contract items Asphalt Adjustment and Fuel Adjustment for possible future payments at an established Contract unit price of \$1.00. The Department will calculate actual adjustment quantities after work is completed. If existing Contract amount is insufficient to pay all items on the contract with the adjustments, the Department will establish additional monies with a change order.

OPTION A

Be advised that the Department will accept compaction of asphalt mixtures furnished for driving lanes and ramps, at 1 inch (25mm) or greater, on this project according to OPTION A in accordance with Section 402 and Section 403 of the current Standard Specifications. The Department will require joint cores as described in Section 402.03.02 for surface mixtures only. The Department will accept compaction of all other asphalt mixtures according to OPTION B.



COUNTIROCK	CASILE	
ITEM NUMBERS:	8-2022.00	
PROJECT NUMBER:	FD52 102 0075 050-053	
CONSTRUCTION NUMBER	R: <u>NHPP IM 0752 (091)</u>	
LETTING DATE:	February 19, 2016	_
	Pan Jata	DATE: 1-12-16
	ct Manager C form Highway Engineer	DATE: 1/12/16
FHWA APPROVED BY:		DATE:

ROCKCASTLE COUNTY Contract ID: 161210 Page 20 of 147 NHPP IM 0752 (091)
[MATCHLINE (SEE SHEET 2) COUNTY OF 8-2022.00 ROCKCASTLE LAUREL Co LINE = 50.767 NB 2680+00 M.P. 50.711 BEGIN ROCKCASTLE RIVER BRIDGE POB 2676+48.71 2676+49 SCALE: 1"=200' I–75 STATIONING INFORMATION SHEETS (1 OF 5)

ROCKCASTLE COUNTY Contract ID: 161210 Page 21 of 147 PIM.0752 (091) MATCHLINE (SEE SHEET 3) COUNTY OF ROCKCASTLE 8-2022.00 2700+00 SB 2695+00 -M.P. 51 PC 2690+90.62 2690+00 KY 1329 UPPER RIVER ROAD 2685+00 I-75 STATIONING INFORMATION SHEETS MATCHLINE (SEE SHEET 1) (2 OF 5)

ROCKCASTLE COUNTY Contract ID: 161210 Page 22 of 147 (SEE SHEET 4) COUNTY OF ROCKCASTLE 8-2022.00 2720+00 2715+00 SB NB 2710+00 PI 2708+48.95 2705+00 SCALE: 1"=200' I-75 STATIONING INFORMATION SHEETS MATCHLINE (SEE SHEET 2) (3 OF 5)

ROCKCASTLE COUNTY Contract ID: 161210 Page 23 of 147 NHPHIM 10752 (091) (SEE SHEET 5) COUNTY OF ROCKCASTLE 8-2022.00 2735+00 2730+00 I-75 NB I-75 SB PT 2725+02.73 2725+00 2720+00 I-75 STATIONING INFORMATION SHEETS MATCHLINE (SEE SHEET 3) (4 OF 5)

ROCKCASTLE COUNTY Contract ID: 161210 Page 24 of 147 NHPP IM 0752 (091) COUNTY OF ROCKCASTLE 8-2022.00 2755+00 PT 2753+37.85 M.P. 52.05 STA. 2749+66.10 END PROJECT 2750+00 PI 2749+13.56 SB NB PC 2744+87.71 2745+00 2740+00 I-75 STATIONING INFORMATION SHEETS MATCHLINE (SEE SHEET 4) (5 OF 5)

Contract ID: 161210 Page 25 of 147

GENERAL SUMMARY I-75 ROCKCASTLE COUNTY MP 50.711 TO MP 52.05 **ITEM NUMBER 8-2022.00**

-	TI LIM NOMBER 0-2022.00	1	T
ITEM NUMBER	ITEM	QUANTITY	UNIT
1	DGA BASE (1)	3000	TON
100	ASPHALT SEAL AGGREGATE	221	TON
103	ASPHALT SEAL COAT	27	TON
190	LEVELING AND WEDGING PG64-22	500	TON
214	CL3 ASPH BASE 1.00D PG64-22 (2)	42	TON
339	CL3 ASPH SURF 0.38D PG64-22	2967	TON
342	CL4 ASPH SURF 0.38A PG76-22	4108	TON
461	CULVERT PIPE - 15 IN	4	LF
462	CULVERT PIPE - 18 IN	54	LF
1204	PIPE CULVERT HEADWALL - 18 IN	1	EACH
1480	CURB BOX INLET TYPE B	2	EACH
1825	ISLAND CURB AND GUTTER	45	LF
1982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL- WHITE	70	EACH
2220	FLOWABLE FILL	10	CUYD
2237	DITCHING (3)	6225	LF
2363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	1	EACH
2367	GUARDRAIL END TREATMENT TYPE 1	1	EACH
2369	GUARDRAIL END TREATMENT TYPE 2A	1	EACH
2381	REMOVE GUARDRAIL	6975.0	LF
2387	GUARDRAIL CONNECTOR TO BRIDGE END TY A-1	1	EACH
2483	CHANNEL LINING CLASS II (4)	300	TON
2484	CHANNEL LINING CLASS III (4)	100	TON
2562	TEMPORARY SIGNS (5)	500	SQFT
2568	MOBILIZATION	1	LS
2569	DEMOBILIZATION	1	LS
2650	MAINTAIN AND CONTROL TRAFFIC	1	LS
2671	PORTABLE CHANGEABLE MESSAGE SIGN (6)	6	EACH
2676	MOBILIZATION FOR MILLING & TEXTURING	1	LS
2677	ASPHALT PAVE MILLING & TEXTURING	7075	TON
2696	SHOULDER RUMBLE STRIPS-SAWED	24898	LF
2714	SHOULDERING	12450	LF
2775	ARROW PANEL (6)	2	EACH
5950	EROSION CONTROL BLANKET	100	SQYD
6401	FLEXIBLE DELINEATOR POST-M/W	62	EACH
6412	STEEL POST MILE MARKERS (7)	4	EACH
6427	TRENCHING	1040	LF
6511	PAVEMENT STRIPING-TEMP PAINT -6 INCH	70000	LF
6549	PAVE STRIPING-TEMP REM TAPE-B	5000	LF
6550	PAVE STRIPING-TEMP REM TAPE-W	15000	LF
6551	PAVE STRIPING-TEMP REM TAPE-Y	10000	LF
6556	PAVE STRIPING-DUR TY 1-6 IN W	2541	LF
6557	PAVE STRIPING-DUR TY 1-6 IN Y	1694	LF
6592	PAVEMENT MARKER TYPE V-B W/R	311	EACH
6593	PAVEMENT MARKER TYPE V-B Y/R	311	EACH
8100	CLASS A CONCRETE (8)	5	CUYD
10020NS	FUEL ADJUSTMENT	11013	DOLL
10030NS	ASPHALT ADJUSTMENT	27660	DOLL
20071EC	JOINT ADHESIVE	24900	LF
20757ED	PAVEMENT REPAIR (9)	1900	SQYD
20758ED	REMOVE AND RESET PERF PIPE HEADWALL (10)	5	EACH
21533EN	EMBANKMENT (11)	25	CUYD
21554EN	EXCAVATION (11)	25	CUYD
21802EN	GUARDRAIL-STEEL W BEAM-S FACE (7 FT POST)	7012.5	LF
22983EN	EPOXY HEALER-SEALER	115000	SQYD
23143ED	KPDES PERMIT AND TEMP EROSION CONTROL	1	LS
23479EC	CURE IN PLACE PIPE LINER - 15 IN	484	LF
24380EC	CURE IN PLACE PIPE LINER - 18 IN	379	LF
23484EC	PERFORM CIPP ACCEPTANCE TESTING	1	LS
24543EC	CLEAN	863	LF
24189ER	DURABLE WATERBORNE MARKING-6 IN W	18675	LF
24190ER	DURABLE WATERBORNE MARKING-6 IN Y	12450	LF
		1	l .

- (1) For guardrail end treatment replacement and slope repair. (2,625 carried over from the drainage summary)
- For permeable pavement drainage (2)

(6)

- Ditching is intended for repair of the eroded areas in pipe outlet ditches, and cleaning of drainage structures 36" or less than in diameter. (3) Any embankment required is incidental to ditching.
- Channel lining Class II & III to be used as directed by the Engineer Geotextile Fabric Type 1 to be placed under Aggregate Channel Lining is considered incidental to the lining. (4)
- Intended for temporary traffic control signs and includes initial placement only. Any relocation of these temporary (5)
- signs required will not be paid for directly but will be considered incidental.
- (7) Replace mile post markers at M.P.51 and 52 in both directions.
- (8) To be used as directed by the Engineer for drainage structure repair.
- 1850 sq yds to be used for pavement repair (see detail) Northbound MP 50.87 tp MP 50.98 and 50 sq yds to be used as directed by the Engineer. (9)
- (10)1 headwall carried over from the drainage summary and 4 to be used as directed by the Engineer.
- Quantity to be used as directed by the Engineer. Contrary to the Standard Specifications, payment will be based on measured quantity NOT plan quantity.

The quantity for these items includes the maximum in place at any one time. Any relocation required will not be paid for directly but will be considered incidental.

NOTE: Quantities from all summaries have been carried over and included in this General Summary

	PA	PAVEMENT SUMMARY			
	I-75 F	I-75 ROCKCASTLE COUNTY MP 50.711 TO MP 52.05			
	ITEM	ITEM NUMBER 8-2022.00			
		PAVING AREAS			
	ITEM	TOTAL			
DRIVING LANES 1.5" CL4 ASPH SURF 0.38A PG76-22	3A PG76-22	S.Y. 49797			
INSIDE AND OUTSIDE SHOULDERS 1.5" CL3 ASPH SURF 0.38D PG64-22	IOULDERS 3D PG64-22	35964			
ASPHALT PAVE MILLING & TEXTURING PROJECT LIMITS (1.5")	8 TEXTURING	85761			
ASPHALT SEAL COAT ASPHALT SEAL AGGREGATE	АТЕ	11067 11067			
		PAVING SUMMARY			
CODE	ITEM		UNITS	TOTAL	
100	ASPHALT SEAL AGGREGATE		(1) TON	221	
103	ASPHALT SEAL COAT		(2) TON	27	
339	CL3 ASPH SURF 0.38D PG64-22		NOT	2967	
342	CL4 ASPH SURF 0.38A PG76-22		NOT	4108	
2677	ASPHALT PAVE MILLING & TEXTURING		NOT	7075	
	NOTES ALL ASPHALT MIXTURES ESTIMATED AT 110 LBS. PER SQ. YD. PER INCH OF DEPTH (1) TWO APPLICATIONS AT 20 LB/SY (2) TWO APPLICATIONS AT 2.4 LB/SY	10 LBS. PER SQ. YD. PER INCH OF [ЭЕРТН		
	QUANTITIES HAVE BEEN CARI	QUANTITIES HAVE BEEN CARRIED OVER AND INCLUDED IN THE GENERAL SUMMARY	SENERAL SUMMARY		

			GUARDRAIL SUMMARY I-75 ROCKCASTLE COUNTY MP 50 711 TO MP 52 05	GUARDRAIL SUMMARY '5 ROCKCASTLE COUNT MP 50 711 TO MP 52 05	YT S				91)
			ITEM NUME	ITEM NUMBER 8-2022.00	00				
LOCATION	SIDE	BEGIN	END	G/R STEEL W BEAM-S FACE (7 FT POST)	REMOVE GUARDRAIL	GUARDRAIL REMOVE END GUARDRAIL TREATMENT TYPE 1	GUARDRAIL END TREATMENT TYPE 2A	GUARDRAIL GUARDRAIL CONNECTOR TO BRIDGE END TY A END TY A-1	GUARDRAIL CONNECTOR TO BRIDGE END TY A-1
'n	Units			LIN	LIN. FT.		EA	EACH	
Item N	Item Number			21802EN	2381	2367	2369	2363	2387
Northbound									
1-75	RT	50.88	52.12	6562.5	6562.5		1		1
Southbound									
J-15	LT	50.87	96.09	450.0	412.5	1		1	
PROJEC	PROJECT TOTAL			7012.5	6975.0	1	1	1	_

		COMMENTS			Line existing pipe under northbound lanes	Replace existing CBI, Line existing pipe to outlet	Line existing pipe under northbound lanes	Repair/reshape entire length of shoulder and adjacent slope	Remove existing paved dtich and replace with channel lining	Line existing pipe under median barrier wall	Line existing pipe under median barrier wall	Remove existing paved dtich and replace with channel lining and line existing pipe under northbound lanes	Line existing pipe under median barrier wall	Remove existing paved dtich and replace with channel lining	Add channel lining at outlet of existing headwall	24" PIPE	Remove existing paved dtich and replace with channel lining		Replace existing CBI, Line existing pipe to median and construct new pipe outlet to the West as directed by the Engineer	Line existing pipe to median		Add channel lining to end of existing paved ditch	
		REMOVE & RESET PERFINALL (3)	EACH	700 707																	-		
		СГЕРИ	24E43EC	2000	72	72	160			122	38	155	26						72	75			
		CURE IN PLACE PIPE	LF 23.480EC	2350E2	72		160												72	75			
		CURE IN PLACE PIPE	23470EC	234,350		72				122	38	155	26										
MARY ITY	0	СНАИИЕГ ГІИІИС СГ ІІ (2)	TON	5047					32			54		62	10		21					2	
PIPE AND DRAINAGE SUMMARY I-75 ROCKCASTLE COUNTY MP 50.711 TO MP 52.05	ITEM NUMBER 8-2022.00	CURB BOX INLET TYPE B	CH	00+		7													1				
CASTLE 11 TO N	MBER 8	PIPE CULVERT HEADWALL - 18 INCH	EACI	107															-				
AND DE ROCK AP 50.7	EM NO	СОГЛЕВТ РІРЕ - 18 ІИСН	LF	7040		4													90				
PIPE I-74	_	CULVERT PIPE - 15 INCH	LF	25		4																	
		Abd	TON	9				2,625															
		(t) Taltoutet (1)	ЕАСН	!												1							
		EXISTING TYPE(4)			MEDIAN BOX	CURB BOX	18" PIPE	WASHOUT	рітсн	MEDIAN BOX	MEDIAN BOX	15" PIPE AND DITCH	MEDIAN BOX	рітсн	HDWL	HDWL	рпсн		CURB BOX	18" PIPE	PERF PIPE HDWL	рисн	
		NODES (5)			2, 3	1,2	5,6			8,9	9, 12	11, 12	10, 12						3,4	6, 7			
		MILE						52.12		51.00	51.01		51.03										
		MILE	Units		50.88	50.89	96.09	50.88	96.09	50.98	51.00	51.01	51.01	51.07	51.26	51.47	51.55		50.87	96.09	51.56	51.74	
		SIDE	l la		MED	RT	R	RT	RT	MED	MED	R	MED	RT	RT	RT	RT		רד	5	5	LT	
		LOCATION		NORTHBOUND	1-75	1-75	1-75	1-75	1-75	1-75	1-75	1-75	1-75	1-75	1-75	1-75	1-75	SOUTHBOUND	92-1	1-75	1-75	1-75	

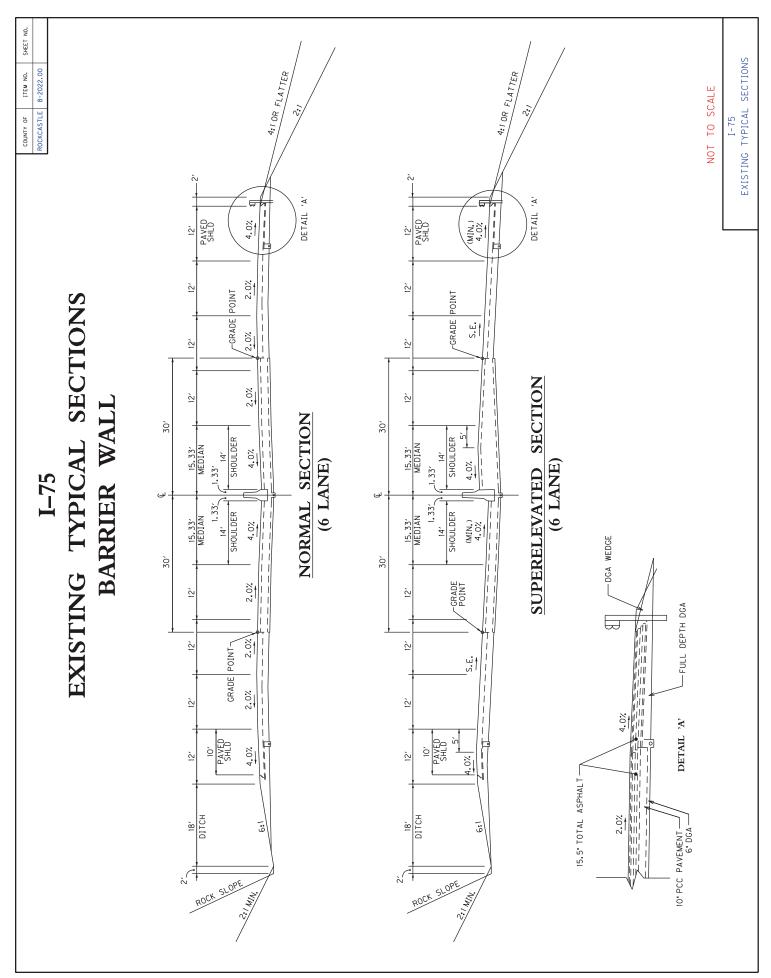
(1) - INCIDENTAL TO BID ITEM "DITCHING"

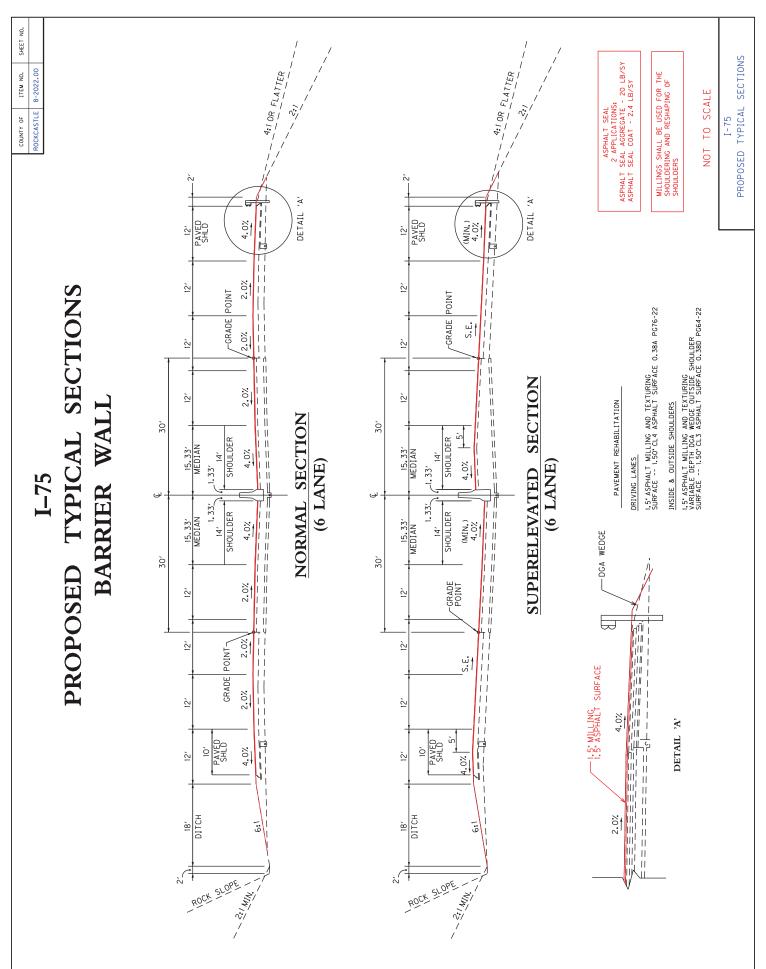
(2) - REMOVAL OF PIPE, STRUCTURE, PAYED DITCH AND/OR CURB IS CONSIDERED INCIDENTAL TO CONSTRUCTION OF NEW BID ITEM

(3) - OTHER LOCATIONS MAY EXIST. A QUANTITY HAS BEEN ADDED TO THE GENERAL SUMMARY TO BE AS DIRECTED BY THE ENGINEER

(4) - EXISTING STRUCTURES WEED TO BE VERHIEID IN THE FIELD.

(5) - REFERENCES NODES FROM VIDEO PIPE INPECTION. SEE NODE MAP IN RELATED PROJECT INFORMATION FILE FOLDER FOR PROJECT



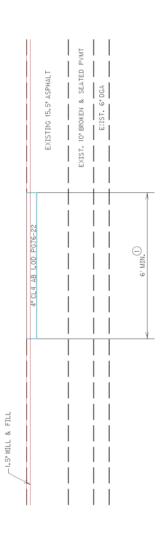


ROCKCASTLE 8-2022.00

ITEM NO.

COUNTY OF

I-75 TYPICAL SECTIONS



MINOR PAVEMENT REPAIR DETAIL

SPECIFIC LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

BEFORE REMOVAL OF THE EXISTING MATERIAL, SAW CUTS SHALL

BE MADE ON EACH SIDE OF THE AREA TO BE REMOVED. THIS OPERATION

SHALL BE PERFORMED ON THE OUTSIDE SHOULDER AND DRIVING LANES WHERE DIRECTED.

AFTER ALL EXISTING MATERIAL HAS BEEN REMOVED THEN EACH COURSE OF BACKFILL MATERIAL SHALL BE COMPACTED TO THE PROPER DENSITY FOR THE MATERIAL BEING PLACED AS REQUIRED IN THE STANDARD SPECIFICATIONS.

TRAFFIC SHALL BE ALLOWED TO TRAVEL ON REPAIRS FOR A MINIMUM OF 7 DAYS PRIOR TO MILLING AND RESURFACING,

THE CONTRACT UNIT BID PRICE PER SO YD FOR PAVEMENT REPAIR (MINOR) SHALL INCLUDE ROADWAY EXCAVATION, REMOVING PAVEMENT, SAW CUTTING, ASPHALT BASE AND ALL INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION AS DETAILED.

I-75 ROCKCASTLE COUNTY MP 50.711 TO MP 52.05 FD52 102 0075 050-053 Item No. 8-2022.00

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

I. DESCRIPTION

Perform all work in accordance with the Department's 2012 Standard Specifications, Supplemental Specifications, any applicable Special Provisions, and applicable Standard and Sepia Drawings, except as hereafter specified. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals for the following work:

(1) Maintain and Control Traffic; (2) Remove and replace Guardrail and Guardrail End treatments at the locations listed and/or as directed by the Engineer; (3) Type V pavement markers; (4) Asphalt Pavement Milling and Texturing; (5) Asphalt Surface and Asphalt Base at locations listed and/or as directed by the Engineer; and (6) All other work specified as part of this contract.

II. MATERIALS

Except as specified in these notes or on the drawings, all materials will be according to the Standard Specifications and applicable Special Provisions and Special Notes. The Department will sample and test all materials according to Department's Sampling Manual and the Contractor will have the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in these notes.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- B. **Dense Graded Aggregate.** Crushed Stone Base may not be furnished in lieu of DGA.
- C. **Pavement Markings -6 inch Paint.** Use Durable Waterborne Marking 6-inch for permanent striping.

- D. Channel Lining Class II & III. Channel lining will be limestone and is to be placed at pipe outlets with significant erosion and in ditch repair locations as directed by the Engineer.
- E. **Erosion Control Blanket.** Erosion control blanket is to be placed in all ditching areas when ditching is complete, on slope stabilization areas, or as directed by the Engineer. Use Seed Mixture No. 1.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic. See Traffic Control Plan.
- B. **Site Preparation.** Be responsible for all site preparation. Do not disturb existing signs. This item will include, but is not limited to, incidental excavation and backfilling; removal of all obstructions or any other items; disposal of materials; sweeping and removal of debris; shoulder preparation and restoration, temporary and permanent erosion and pollution control; and all incidentals. Site preparation will be only as approved or directed by the Engineer. Other than the bid items listed, no direct payment will be made for site preparation, but will be incidental to the other items of work.
- C. Disposal of Waste. Dispose of all cuttings, debris, and other waste off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. The contractor will be responsible for obtaining any necessary permits for this work. Temporary openings in the right of way fence for direct access to waste sites off the right of way or for access to other public roads will not be allowed. No separate payment will be made for the disposal of waste and debris from the project or obtaining the necessary permits, but will be incidental to the other items of the work.
- D. **Final Dressing, Clean Up, and Seeding and Protection.** After all work is completed, completely remove all debris from the job site. Perform Class A Final Dressing on all disturbed areas. Sow disturbed earthen areas with Seed Mixture No. I. These items are incidental to other items in the contract.
- E. **Guardrail.** Remove and replace guardrail and guardrail End Treatments listed in the Guardrail Summary or as directed by the Engineer. Guardrail, End Treatments and Terminal Sections are listed by mile points and quantities are approximate only. Actual locations will be determined by the Engineer at the time of construction. Grade and reshape shoulders to proper template for new End Treatment. Utilize DGA for embankment when required for new end treatments. Remove any existing guardrail with a lane closure in place.

Do not leave the area unprotected. After the guardrail is removed, a shoulder closure shall remain in place until the guardrail is replaced in that area. To minimize safety hazards, guardrail removal is to be performed at the latest practical time prior to initiating the paving operation in an area and re-installation is to begin within 5

calendar days from the time that the final surface course is completed and shall be pursued until completion. If guardrail installation is not started within 5 calendar days after paving operations ends, Liquated Damages will be charged as outlined in Section 108 of the 2012 Standard Specifications.

The Contractor shall deliver existing salvaged guardrail system materials to the Guardrail and Sign Center on Wilkinson Blvd in Frankfort, KY and shall be neatly stacked in accordance with section 719.03.07 of the Standard Specifications. Contact Section Supervisor at (502) 564-8187 to schedule the delivery of material. Deliver the material between the hours of 8:00AM and 3:00PM, Monday through Friday. There is a guardrail delivery verification sheet which must be completed. The Contractor, engineer, and Central Sign/Guardrail Center representative must all sign off on this sheet before payment may be made.

- F. **Pavement Striping and Pavement Markers.** Permanent striping will be in accordance with Section 112, except that:
 - (1). Striping will be 6" in width
 - (2). Permanent striping will be in place before a lane is opened to traffic; and
 - (3). Permanent striping will be 6" Durable Waterborne Marking Permanent Paint.
- G. **On-Site Inspection.** Each Contractor submitting a bid for this work will make a thorough inspection of the site prior to submitting a bid and will thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the Department.
- H. Caution: Information shown on the drawings and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information above.
- I. **Utility Clearance.** It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- B. **Site Preparation.** Other than the bid items listed, site preparation will not be measured for payment, but will be incidental to the other items of work.
- C. **Dense Graded Aggregate.** DGA will be used for guardrail end treatments.
- D. **Raised Pavement Markers and Permanent Striping.** Permanent striping Durable Waterborne Marking (6") is measured per linear foot. See Traffic Control Plan. Type V pavement markers are measured as each.
- E. **Erosion Control.** Erosion control items not listed as bid items will not be measured for payment, but will be considered incidental to the "lump sum" price for the bid item "K.P.D.E.S. Permit and Temporary Erosion Control".
- F. **Erosion Control Blanket.** Erosion Control Blanket is measured by square yard and is to be used in ditching areas and slope stabilization areas as directed by the Engineer.
- G. **Embankment.** Embankment is measured by cubic yard and is to be placed in pipe repair/extension locations, slope stabilization areas and as directed by the Engineer. Contrary to the Standard Specifications, payment will be based on measured quantity **NOT** plan quantity.

V. BASIS OF PAYMENT

No direct payment will be made other than for the bid items listed. All other items required to complete the construction will be incidental to the bid items listed. Existing signs damaged by the Contractor will be replaced by the Contractor at his expense.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- B. **Site Preparation.** Other than the bid items listed, no direct payment will be allowed for site preparation, but will be incidental to the other items of work.
- C. **Dense Grade Aggregate.** See Section 302 of the Standard Specifications.
- D. Raised Pavement Markers and Permanent Striping. See Traffic Control Plan.

NOTES APPLICABLE TO PROJECT PAVEMENT REHABILITATION I-75 ROCKCASTLE COUNTY Item No. 8-2022.00

- 1. The dimensions shown on the typical section for pavement and shoulder widths and thickness are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened unless specified in the Proposal.
- 2. No locations of low wires were found within the project limits.

CAUTION: Locations may still exist. All utilities should be avoided on this project. If any utility is impacted, it will be the contractor's responsibility to contact the affected utility and cover any costs associated with the impact.

- 3. Guardrail, End Treatments, and Terminal Sections to be replaced are listed by mileposts. Exact placement to be approved by the Engineer on construction.
- 4. Remove any existing guardrail with a lane closure in place. Do not leave the area unprotected. After the guardrail is removed, a shoulder closure shall remain in place until the guardrail is replaced in that area. The Contractor shall deliver existing salvaged guardrail system materials to the Central Sign Shop and Recycle Center in in Frankfort, KY (502-564-8187) between the hours of 8:00AM and 3:00PM, Monday through Friday and shall be neatly stacked in accordance with section 719.03.07 of the standard specifications. Contractor, engineer, and Central Sign Shop and Recycle Center representative must all sign off on this sheet before payment may be made.
- 5. A quantity of Channel Lining Class II & III has been included to be applied as directed by the Engineer to eroded areas around drainage outlets and for some of the areas that are to be ditched. The actual limits of ditching and/or channel lining shall be as directed and/or approved by the Engineer. Geotextile Fabric Type I, placed with channel lining in accordance with the standard drawings, will not be measured for payment and will be considered incidental to channel lining.
- 6. Any roadway signs that are damaged during construction are to be replaced at the contractor's expense.
- 7. Any light poles that are damaged during construction are to be replaced at the contractor's expense.
- 8. The existing edge drain system is to be preserved. Care should be taken when the asphalt is removed and replaced, and edge drains damaged during these activities will be replaced at the contractor's expense.

- 9. The cleaning of existing pipe culvert inlets and outlets 36 inches or less in diameter are incidental to the bid item for "Ditching" in accordance with Section 209.03.01 of the 2012 Edition of the Standard Specifications for Road and Bridge Construction.
- 10. Millings, in lieu of DGA will be used to construct/reshape the outside shoulder wedges throughout the project as directed by the Engineer. A quantity of "Shouldering" is included to place, compact and shape the asphalt millings as directed by the Engineer. All shoulders are to receive two applications of asphalt seal coat. The width of the asphalt seal may vary throughout the project. The actual width shall be as directed by the Engineer. Quantities of asphalt seal coat and asphalt seal aggregate are included in the General Summary for the project wide shoulder wedging/reshaping. The contractor will retain all surplus millings.
- 11. There is a quantity of "DITCHING" set up on the project. The Engineer will determine the areas that will need to be ditched. The contractor is to ensure that there is positive drainage throughout the project area. The contractor shall remove all debris from ditches, including boulders and brush. The contractor shall remove all loose rock and brush up to and including the first bench cut in the existing rock cuts or as directed by the engineer.
- 12. The existing southbound ditch from MP 50.86 to MP 50.95 will be regraded, as directed by the Engineer, to drain toward the Rockcastle River. Payment for this work will be considered incidental to the bid item for "DITCHING".
- 13. Pavement rideability requirements in accordance with Section 410 Category A of the standard specifications shall apply on this project.
- 14. Means of access for the proposed pipe cleaning and lining required will be the responsibility of the Contractor. Any damage caused to inlets, headwalls, pavement or other roadway items will be repaired or replaced, as directed by the Engineer, at the contractors expense.
- 15. Pipes designated on the pipe drainage summary are to be thoroughly cleaned out. Payment for this work will be made as "CLEAN" and will be paid per linear foot of pipe cleaned. The pipes and sizes to be cleaned are shown on the pipe summary. The Kentucky Transportation Center has video inspected the pipes specified on the summary. A summary of their findings is included in the "Related Project Information" file folder for this project. Contractor will be required to provide a post cleaning video of these pipes to verify that the pipes have been completely cleaned out. Video Inspection will be required before and after CIPP Liners are installed. Required Video Inspections will be paid only once as a lump sum under the bid item "PERFORM CIPP ACCEPTANCE TESTING".

After cleaning pipes, Engineer will verify which pipes will be lined. Engineer in the field may change pipe rehabilitation method due to differential settlement or other deficiencies in the pipe discovered after cleaning of the pipe.

TRAFFIC CONTROL PLAN

I-75 ROCKCASTLE COUNTY MP 50.711 TO MP 52.05 Item No. 8-2022.00 FD52 102 0075 050-053

THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the 2012 Standard Specifications and the Standard Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic". All lane closures used on the Project will be in compliance with the appropriate Standard Drawings. Do NOT use cones for lane closures or shoulder closures.

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition at the beginning of the work and maintained in like new condition until completion of the work. Traffic Control Devices will conform to current MUTCD.

Reduce the speed limit in work areas to 55 miles per hour and establish double fines for work zone speeding violations. The extent of these areas within the project limits will be restricted to the proximity of actual work areas as determined by the Engineer. Notify the Engineer a minimum of 12 hours prior to using the double fine signs. At the beginning of the work zone, the "WARNING FINE DOUBLED IN WORK ZONE" signs will be dual mounted. At the end of the work zone, the "END DOUBLE FINE" signs will be dual mounted as well. Remove or cover the signs when the highway work zone does not have workers present for more than a two-hour period of time. Payment for the signs will be at the unit bid price for signs erected. Any relocation or covering of the signs will be incidental to Maintain and Control Traffic.

Night work is permitted on this project. Obtain approval from the Engineer for the method of lighting prior to its use.

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PROJECT PHASING & CONSTRUCTION PROCEDURES

No lane closures will be allowed during the following days:

March 25, 2016 – March 27, 2016 Easter Weekend May 27, 2016 – May 30, 2016 Memorial Day Weekend

NASCAR Bristol Races To be determined by the Department

The contractor **shall maintain a minimum of two lanes** in each direction during the following days and hours unless otherwise stated in this proposal or approved by the Engineer:

8:00 p.m. Sunday to 9:00 a.m. Friday

The contractor **shall maintain a minimum of three lanes** in each direction during the following days and hours unless otherwise stated in this proposal or approved by the Engineer:

9:00 a.m. Friday to 8:00 p.m. Sunday

The minimum clear lane width will be 11 feet. Use a lane closure all times when work is performed in the lane or adjacent shoulder. Shoulders used as temporary roadways will be inspected by the Engineer and if deemed necessary by the Engineer, repaired with Asphalt Mixture for Level & Wedging as directed prior to opening to traffic. Perform any maintenance of the shoulder as deemed necessary by the Engineer in order to maintain traffic. All removal of existing striping shall be by water blasting, unless otherwise directed by the Engineer, and this work shall be considered incidental to "Maintain and Control Traffic." Remove both edge lines throughout the project. Paint temporary edge lines through the lane closure.

All pavement edge transitions must be smooth and level before opening both lanes up to traffic. A lane closure must be in place during all times that pavement edge drop-offs are present (see Pavement Edge Drop-off note).

The Engineer will determine exact locations of pavement repair, if any, at the time of construction. Once removal of pavement at a particular repair location has begun, work continuously within the parameters outlined above to complete the work and eliminate the "hole". Place Type III Barricades immediately in front of pavement removal areas. Once pavement removal at a site has begun, full depth replacement must be completed within the time a lane closure is allowed.

Note that Lane shifts are required throughout the project. See the Exhibits for lane locations and widths. Stripe according to the MUTCD.

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During the days and hours when a lane closure is allowed, implement the following procedures: Maintain traffic as specified in the phasing notes. Any other work not requiring traffic lane widths to be restricted due to barrels or equipment encroaching into the interior lanes can be done during the remaining hours when two lanes of traffic must be maintained. Please refer to the "Special Note for Fixed Completion Date and Liquidated Damages" for damage rates per hour associated with failure to maintain the required number of lanes during the specified time period. Once pavement removal at a site has begun, full depth replacement must be completed within the time a lane closure is allowed. Liquidated Damages, at the rate specified per hour in the "Special Note for Fixed Completion Date and Liquidated Damages", will be assessed for each hour two lanes of traffic is not maintained.

The contractor must notify the Engineer at least fourteen (14) days prior to beginning Phase I construction in either direction.

SHOULDER PREPARATION AND RESTORATION

Prior to placing any lane closures that require shifting traffic onto existing shoulders, patch the shoulders and remove foreign debris as directed by the Engineer. Remove failed materials and perform additional patching as directed by the Engineer during the time the shoulder is used as a travel lane. All work required for shoulder preparation and restoration is incidental to Maintenance of Traffic, with the exception of the asphalt patching, which will be paid at the contract unit bid price for "LEVELING AND WEDGING PG64-22".

PHASE I OUTSIDE SHOULDER AND OUTSIDE LANES PAVEMENT REPAIR

Close the outside lanes to traffic. Repair pavement failures in the outside lanes and shoulder as determined by the Engineer on the mainline. Once the pavement has been removed, the Contractor must work continuously until the pavement has been replaced. The Engineer may restrict the number of locations being repaired at the same time.

Shift traffic to the inside lanes and close the outside lanes to traffic. Mill roadway 1.5 inches on the outside lanes and shoulder. Complete any roadside work including guardrail installation. Place the 1.5 inch final surface.

PHASE II INSIDE LANE AND INSIDE SHOULDER MILL AND FILL

Shift traffic to the outside lane and close the inside lanes to traffic. Mill roadway 1.5 inches on the inside lanes and shoulder. Place the 1.5 inch final surface course.

PHASE III PLACE PERMANENT STRIPING

After all other work is completed, place permanent striping. Mobile operations may be utilized. In addition to newly paved areas, place permanent striping on bridge decks within the project limits.

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LANE CLOSURES

Limit the lengths of lane closures to only that needed for actual operations in accordance with the phasing specified herein, or as directed by the Engineer. Limit lane closures to one lane closure per direction at any given time. Contrary to section 112, lane closures will **NOT** be measured for payment, but are considered incidental to Maintain and Control Traffic.

SIGNS

Additional traffic control signs in addition to normal lane closure signing detailed on the Standard Drawings may be required by the Engineer. Additional signs needed for lane closures may include, but are not limited to, dual mounted TRUCKS USE LEFT/RIGHT LANE, LEFT/RIGHT LANE CLOSED 1 MILE, LEFT/RIGHT LANE CLOSED 2 MILE, LEFT/RIGHT LANE CLOSED 3 MILE, SLOWED/STOPPED TRAFFIC AHEAD. Signage for reduced speed limits and double fine work zones will be furnished, relocated, and maintained by the Contractor.

Contrary to section 112, Individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment.

A quantity of signs has been included for lane shifts, "Roadwork Ahead" signs on entrance ramps, and extra Double Fine signs and Speed Limit signs between interchanges to be paid only once no matter how many times they are moved or relocated.

FLASHING ARROWS

Flashing arrows will be paid for once, no matter how many times they are moved or relocated. The Department **WILL NOT** take possession of the flashing arrows upon completion of the work.

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PORTABLE CHANGEABLE MESSAGE SIGNS

Provide portable changeable message signs in advance of and within the project at locations to be determined by the Engineer. If work is in progress concurrently in both directions, or if more than one lane closure is in place in the same direction of travel, provide additional portable changeable message signs. Place portable changeable message signs one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens relocate or provide additional portable changeable message signs so that traffic has warning of slowed or stopped traffic at least one mile but not more than two miles before reaching the end of the actual queue. The locations designated may vary as the work progresses. The messages required to be provided will be designated by the Engineer. The portable changeable message signs will be in operation at all times. In the event of damage or mechanical/electrical failure, the Contractor will repair or replace the Portable Changeable Message Sign immediately. Portable Changeable Message Signs will be paid for once, no matter how many times they are moved or relocated. The Department WILL NOT take possession of the signs upon completion of the work.

TRUCK MOUNTED ATTENUATORS

Furnish and install MUTCD approved Truck Mounted Attenuators in advance of work areas when workers are present less than 12 feet from traffic. If there is less than 500 feet between work sites, only a single TMA will be required at a location directed by the Engineer. Locate the TMAs at the individual work sites and move them as the work zone moves within the project limits. All details of the TMA installations shall be approved by the Engineer. Truck Mounted Attenuators will not be measured for payment, but are incidental to Maintain and Control Traffic. The Department WILL NOT take possession of the TMAs upon completion of the work.

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PAVEMENT MARKINGS

If lane closures are in place during nighttime hours, remove or cover the lenses of raised pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer. Replace or uncover lenses before a closed lane is reopened to traffic. No direct payment will be made for removing and replacing or covering and uncovering the lenses, but will be incidental to "Maintain and Control Traffic".

Place temporary and permanent striping in accordance with Section 112, except that:

- 1. Temporary and permanent striping will be 6" in width; and
- 2. If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved removable lane tape will be used; however removable tape will be measured and paid as Pavement Striping-Temporary Paint 6"; and
- 3. Edge lines will be required for temporary striping; and
- 4. Existing, temporary, or permanent striping will be in place before a lane is opened to traffic.
- 5. Place permanent striping on pavement within the project limits.
- 6. Permanent striping will be Permanent Paint.

Should the Contractor change the existing striping pattern, the Contractor is to restripe the roadway back to its original configuration after a certain period of time especially if no work is anticipated for a period of time (i.e. winter shutdown).

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PAVEMENT EDGE DROP-OFFS

Pavement edge drop-offs will be protected by a lane or shoulder closure. Lane closures will be protected with plastic drums, vertical panels, or barricades as shown on the Standard Drawings.

A pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation shall not have an elevation difference greater than 1 ½". Place warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual posting on both sides of the traveled way shall be required. Wedge all transverse transitions between resurfaced and unresurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course. Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" – Protect with a lane closure.

2" to 4" – Protect with a lane closure. Place plastic drums, vertical panels, or barricades every 50 feet. Cones may not be used in place of plastic drums, panels, and barricades at any time. Construct a wedge with compacted cuttings from milling, trenching, or asphalt mixtures with a 3:1 or flatter slope, when work is not active in the drop-off area. Place Type III Barricades at the beginning of the lane closures, and place additional Type III Barricades spaced at 2,500 feet during the time the lane closure is in place.

Greater than 4" – Pavement Repair areas – In areas where pavement is to be removed, work should proceed continuously so that traffic is exposed to a drop-off for the minimum amount of time necessary to bring the pavement back up to existing grade. Barrel spacing should be 20 feet and appropriate lighting should be utilized to illuminate the area during nighttime operations.

Guardrail Installation – Guardrail will be removed at the last practical moment and replaced as soon as the placement of all base courses in an area requiring guardrail is complete. All areas from which guardrail is removed shall be protected by a shoulder closure or other method approved by the Engineer until the new guardrail is installed.

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TRAFFIC COORDINATOR

Designate an employee to be traffic coordinator. The designated Traffic Coordinator must be certified by an agency qualified for training in this area. The Traffic Coordinator will inspect the project maintenance of traffic once every two hours during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator will report all incidents throughout the work zone to the Engineer on the project. The Contractor will furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

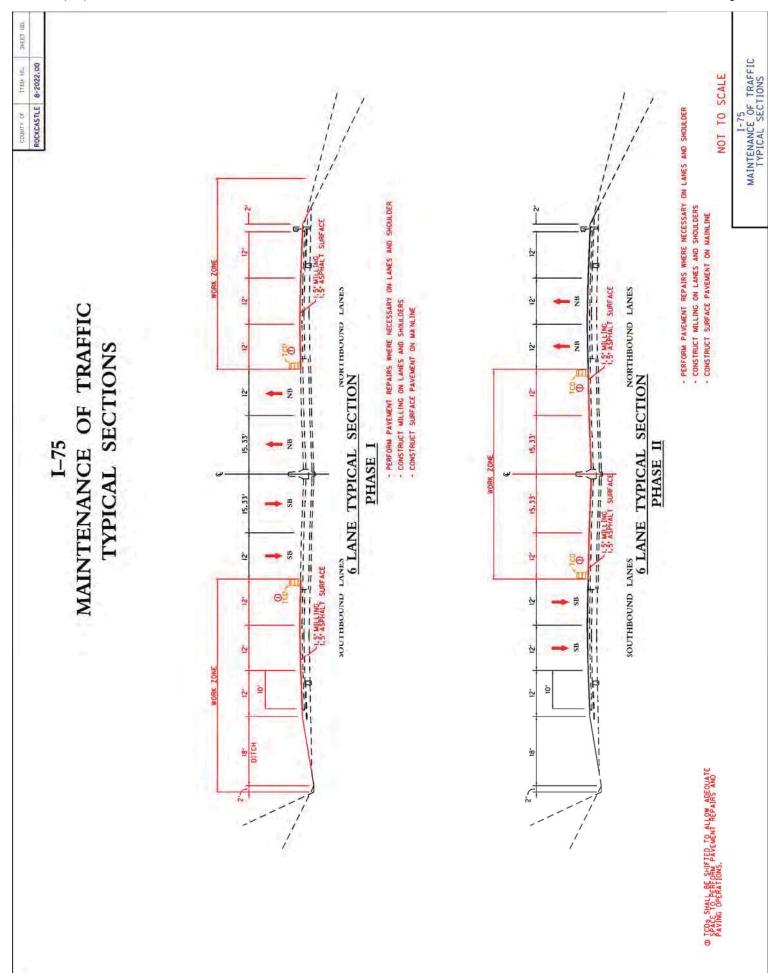
During any period when a lane closure is in place, the Traffic Coordinator will arrange for personnel to be present on the project at all times to inspect the traffic control, maintain the signing and devices, and relocate portable changeable message boards as queue lengths change. The personnel will have access on the project to a radio or telephone to be used in case of emergencies or accidents.

COORDINATION OF WORK

The Contractor is advised that other projects may be in progress within or in the near vicinity of this project. The traffic control of those projects may affect this project and the traffic control of this project may affect those projects. The Contractor will coordinate the work on this project with the work of the other contractors. In case of conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

CONTRACTOR'S AND CONTRACTOR'S EMPLOYEES' VEHICLES

Do not use or allow employees to use median crossovers at any time except when inside lanes are closed for construction. In all other phases of construction, change vehicular direction of travel only at interchanges.



REFERENCES

- 1. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Edition of 2012.
- 2. FHWA Manual on Uniform Traffic Control Devices.
- 3. Active Sepia List

Drawing No.	<u>Drawing Name</u>
002	Delineators for Guardrail
004	Delineators for Concrete Barriers
007	Guardrail End Treatment Type 2A
008	Guardrail Components
011	Shoulder Rumble Strips
012	Steel Beam Guardrail "W" Beam
013	Guardrail Posts
014	Guardrail Connector to Bridge End Type A and A-1 Components
018	Flexible Delineator Post Arrangements for Horizontal Curves
026	Guardrail Connector to Bridge End Type A and A-1
027	Guardrail Connector to Bridge End Type A Components

4. Kentucky Department of Highways Standard Drawings, current editions, as applicable:

RBI-001	Typical Guardrail Installations
RBI-002	Typical Guardrail Installations
RBI-003	Installation of Guardrail End Treatment Type 2A
RBM-001	Concrete Median Barrier Fixed-Form or Slip-Form (Permanent)
RBM-050	Concrete Median Barrier Fixed-Form or Slip-Form (Permanent) (50" Tall Wall)
RBM-053	Concrete Median Barrier Precast (Permanent) (50" Tall Wall)
RBR-010	Guardrail Terminal Sections
RBR-015	Guardrail Posts
RBR-016	Guardrail Posts
RDB-001	Drop Box Inlet Type 1
RDB-002	Drop Box Inlet Type 2
RDB-100	Sloped Box Outlet Type 1
RDB-101	Grates for Sloped Box Outlet Type 1
RDB-105	Sloped And Flared Box Inlet-Outlet
RDB-106	Grates for Sloped And Flared Box Inlet-Outlet
RDB-230	Concrete Median Barrier Box Inlet
RDB-231	Concrete Median Barrier Box Inlet
RDB-240	Concrete Median Barrier Box Inlet (50" Tall Wall)
RDB-241	Concrete Median Barrier Box Inlet (50" Tall Wall)
RDB-280	Curb Box Inlet Type B (Detail Drawing)
RDB-281	Curb Box Inlet Type B (Detail Drawing)
RDB-282	Curb Box Inlet Type B (Top Phase Tables)
RDD-040	Channel Lining Class II and III
RDH-110	Pipe Culvert Headwalls 0° Skew

RDH-210 RDH-312 RDI-001 RDI-002 RDI-003 RDI-004	Dimensions & Quantities 30" – 108" Headwalls Circular Pipe 0° Skew Bill of Reinforcement 96" to 108" Diameter Circular Pipe Headwalls 0° Skew Culvert, Entrance & Storm Sewer Pipe Types and Cover Heights (12" – 24" Pipe) Culvert, Entrance & Storm Sewer Pipe Types and Cover Heights (27" – 42" Pipe) Culvert, Entrance & Storm Sewer Pipe Types and Cover Heights (48" – 54" Pipe) Culvert, Entrance & Storm Sewer Pipe Types and Cover Heights (60" – 66" Pipe)
RDI-020	Pipe Bedding for Culverts, Entrance and Storm Sewer Pipe
RDI-021	Pipe Bedding for Culverts, Entrance, and Storm Sewer Reinforced Conc. Pipe
RDI-025	Pipe Bedding Trench Condition
RDI-026	Pipe Bedding Trench Condition Reinforced Conc. Pipe
RDP-001	Perforated Pipe Types and Cover Heights
RDP-010	Perforated Pipe Headwalls
RDX-060	Intermediate and End Anchors for Circular Pipe
RDX-160	Security Devices for Frames, Grates and Lids
RGS-002	Superelevation for Multilane Pavement
RGX-001	Miscellaneous Standards Part I
TPM-110	Pavement Marker Arrangements Multi-Lane Roadways
TPM-125	Pavement Marker Arrangement Exit Gore and Off-Ramp
TPM-130	Pavement Markers Arrangements On-Ramp With Tapered Acceleration Lane
TPM-135	Pavement Markers Arrangements On-Ramp With Parallel Acceleration Lane
TTC-115	Lane Closure Multi-Lane Highway Case I
TTC-120	Lane Closure Multi-Lane Highway Case II
TTC-125	Double Lane Closure
TTC-135	Shoulder Closure
TTC-155	Temporary Pavement Marker Arrangements for Construction Zones
TTC-160	Temporary Pavement Marker Arrangements for Lane Closures
TTD-110	Post Splicing Detail
TTD-120	Work Zone Speed Limit and Double Fine Signs
TTD-125	Pavement Condition Warning Signs
TTS-110	Mobile Operation for Paint Striping Case III
TTS-115	Mobile Operation for Paint Striping Case IV
TTS-120	Mobile Operation for Durable Striping Case I
TTS-125	Mobile Operation for Durable Striping Case II

5. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Edition of 2012, Appendix B - Supplemental Specifications, as applicable:

Special Note 1I Portable Changeable Message Signs (6/15/2012)

Special Note Asphalt Milling and Texturing *attached*Special Note Typical Section Dimensions *attached*

Special Note Before You Dig attached

Special Note Guardrail Delivery Verification Sheet attached

Special Note Fixed Completion Date and Liquidated Damages attached

Special Note Erosion Prevention and Sediment Control attached

Special Note Shoulder Preparation and Restoration attached (See MOT Notes)

Special Note Pipe Cleaning attached

Special Note Cured-In-Place Pipe Lining attached
Special Note CIPP Acceptance testing attached

Special Note Allowing PVC Fold and Form Pipe Liner attached

Special Note PVC Fold and Form Pipe Liner attached

Special Note Public Information Plan *attached*Special Note Bridge repair items *attached*

ROCKCASTLE COUNTY NHPP IM 0752 (091)

SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING I-75 Rockcastle County Item No. 8-2022.00

Begin paving operations immediately after the commencement of the asphalt milling operation. Continue paving operations continuously until completed. Do not allow public traffic to drive on the milled surface unless otherwise directed by the Engineer. If paving operations are not begun within this time period, liquidated damages will be assessed at the rate prescribed by Section 108.09 of the current Standard Specifications until such time as paving operations are begun.

After utilizing the asphalt millings in areas adjacent to the outside shoulder as directed by the Engineer, the Contractor will take possession of the remainder of the millings and recycle the millings or dispose of the millings off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department.

Removal of the existing pavement markers prior to the milling operation is considered incidental to the bid item "Asphalt Pavement Milling and Texturing".

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS I-75

The dimensions shown on the typical sections for pavement and shoulder widths are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened unless specified elsewhere in the Proposal.

SPECIAL NOTE FOR BEFORE YOU DIG

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.

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GUARDRAIL DELIVERY VERIFICATION SHEET

Contract Id:		Contractor:	
Section Engineer:		District & County: _	
DESCRIPTION	UNIT	QTY LEAVING PROJECT	QTY RECEIVED@BB YARD
GUARDRAIL (Includes End treatments & crash cushions)	LF		
STEEL POSTS	EACH	7-	
STEEL BLOCKS	EACH		
WOOD OFFSET BLOCKS	EACH	-	
BACK UP PLATES	EACH	<u>-</u>	
CRASH CUSHION	EACH		
NUTS, BOLTS, WASHERS	BAG/BCKT	5	
DAMAGED RAIL TO MAINT. FACILI	TY LF	5 <u></u>	
DAMAGED POSTS TO MAINT. FACI	LITY EACH		
*Required Signatures before	e Leaving Proje	ct Site	
Printed Section Engineer's R	epresentative_		_ & Date
Signature Section Engineer's Representative		e	_& Date
Printed Contractor's Representative			_& Date
Signature Contractor's Repre	esentative		_& Date
*Required Signatures after	Arrival at Baile	y Bridge Yard (All material	on truck must be counted & the
quantity received column co	mpleted before	e signatures)	
Printed Bailey Bridge Yard Re	epresentative_		. & Date
Signature Bailey Bridge Yard	Representative	<u>. </u>	_& Date
Printed Contractor's Represe	entative		& Date
Signature Contractor's Repre	esentative		_& Date
	ent will not be	made for guardrail removal	uantities shown in the Bailey Bridge until the guardrail verification sheets se Yard Representative.

Date: _____

By: __

Completed Form Submitted to Section Engineer

Special Note for Fixed Completion Date and Liquidated Damages I-75 Rockcastle County Item No. 8-2022.00

Contrary to Section 108.09, Liquidated Damages of \$5,000 per calendar day will be assessed for each day work remains uncompleted beyond the Specified Project Completion Date. This project has a Fixed Project Completion Date of July 1, 2016.

In addition to the Liquidated Damages specified above, Liquidated Damages in the following amounts will be charged when a lane closure remains in place during the prohibited period outlined in the Traffic Control Plan:

Mainline: \$5,000 for the first hour or fraction thereof

\$10,000 for the second hour or fraction thereof \$20,000 for any additional hour or fraction thereof

These hourly disincentives will still be in effect after the Fixed Completion Date and will be charged in addition to the \$5,000 per calender day if warranted. The contractor is expected to make every effort to complete the work in order to open the mainline lane closure within a specified timeframe.

Contrary to Section 108.09 of the Standard Specifications, the disincentive fee will be charged during those periods when seasonal limitations of the Contract prohibit the Contractor from working on a controlling item or operation. This includes the months from December through March.

All liquidated damages will be applied cumulatively.

All other applicable portions of Section 108 apply.

Special Note For: Erosion Prevention and Sediment Control I-75 Rockcastle Co. Item 8-2022.00

The Contractor shall be responsible for filing the Kentucky Pollution Discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW) and any KPDES local Municipal Separate Storm Sewer System (MS4) program that has jurisdiction. The NOI shall name the contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference.

The Contractor shall perform all temporary erosion/sediment control functions including: providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP plan documents as construction progresses and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on August 1, 2009 or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction. The Engineer's inspections shall be performed a minimum of once per month and within seven days after a storm of ½ inch or greater. Copies of the Engineer's inspections shall not be provided to the contractor unless improvements to the BMP's are required. The contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within 5 days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit.

Contrary to Section 213.05, bid items for temporary BMPs will not be listed and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.

The contractor shall be responsible for applying "good engineering practices" as required by the KPDES permit. The contractor may use any temporary BMPs with the approval of the KYTC Engineer.

The contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

The contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control.

The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 program that has jurisdiction. The NOT shall be filed after the Engineer agrees that the project is stabilized or the project has been formally accepted.

Payment: Payment will be by lump sum under the bid item "K.P.D.E.S. Permit & Temporary Erosion Control".

SPECIAL NOTE FOR PIPE CLEANING

PART 1 -- GENERAL

1.01 SCOPE OF WORK

- A. Furnish all labor, materials, equipment and incidentals required to clean all pipes, as specified herein.
- B. Cleaning shall include the proper high pressure water jetting, rodding, snaking, bucketing, brushing and flushing of pipes prior to inspection by closed circuit television, pipeline rehabilitation, and testing operations.
- C. Cleaning shall dislodge, transport and remove all sludge, mud, sand, gravel, rocks, bricks, grease, roots, sticks, and all other debris from the interior of the sewer pipe and structures as required for pipeline rehabilitation.

PART 2 -- PRODUCTS

2.01 MATERIALS

- A. Hydraulically propelled Sewer Cleaning Equipment
 - 1. Hydraulically propelled sewer cleaning equipment shall be the movable dam type constructed such that a portion of the dam may be collapsed during cleaning to prevent flooding of the sewer.
 - 2. The movable dam shall be the same diameter as the pipe being cleaned and shall provide a flexible scraper around the outer periphery to ensure total removal of grease.
 - 3. Contractor shall take precautions against flooding prior to using sewer cleaning balls or other such equipment that cannot be collapsed instantly.
- B. High Velocity Hydro-Cleaning Equipment shall have the following:
 - 1. A minimum of 500-ft of high pressure hose.
 - 2. Two or more high velocity nozzles capable of producing a scouring action from 15 to 45 degrees in all size lines to be cleaned.
 - 3. A high velocity gun for washing and scouring manhole walls and floor.
 - 4. Capability of producing flows from a fine spray to a long distance solid stream.
 - 5. A water tank, auxiliary engines and pumps and a hydraulically driven hose reel.
 - 6. Equipment operating controls located above ground.
- C. Mechanical cleaning equipment for sewer mains shall be either power buckets or power rodders by the Sewer Equipment Company of America or equal.
 - 1. Bucket machines
 - a. Be furnished with buckets in pairs
 - b. Use V-belts for power transmission or have an overload device. No direct drive machines will be permitted.
 - c. Be equipped with a take up drum and a minimum of 500-ft of cable.
 - d. Have sufficient dragging power to perform the work efficiently.

- 2. Power rodding machine
 - a. Either sectional or continuous.
 - b. Hold a minimum of 750-ft of rod.
 - c. The machine shall have a positive rod drive to produce 2000 pounds of rod pull.

PART 3 -- EXECUTION

3.01 PERFORMANCE

- A. Selection of cleaning equipment shall be based on the conditions of the structures and lines at the time the work commences based on the pre-construction CCTV inspection to be conducted by the Contractor under this Contract.
- B. Use properly selected equipment to remove all dirt, grease, rock and other deleterious materials, and obstructions.
- C. Protect existing lines from damage caused by improper use of cleaning equipment.
- D. Take precautions to avoid damage or flooding to public or private property being served by the line being cleaned.
- F. Removal of Materials
 - 1. Remove all solids and semi-solids at the downstream opening of the section being cleaned.
 - 2. Passing material from one section of a line to another will not be permitted; unless access to any one section of line cannot be achieved.
- G. Remove from the site and properly dispose of all solids or semi-solids recovered during the cleaning operation.
- H. No cleaning shall take place in a particular segment until all upstream pipe segments have been cleaned. If cleaning is done in a downstream pipe segment in order to facilitate overall cleaning operations, the segment shall be re-cleaned at no additional cost, after all pipes upstream of that segment have been cleaned.

3.02 FIELD QUALITY CONTROL

- A. Acceptance of this portion of the work shall be dependent upon the results of the television inspection. Lines not acceptably clean as to permit television inspection and rehabilitation shall be re-cleaned and re-inspected at no additional cost to the Owner
- B. Following cleaning, the Contractor shall inspect each section in accordance with the Special Note for CIPP Acceptance Testing.
- C. Upon the Engineer's final structure to structure inspection of the system, if any foreign matter is still present in the system, clean the sections and portions of the lines as required.

PART 4 – PAYMENT

Payment for cleaning of the pipes as detailed in the Pipe Drainage Summary will be made per linear foot as the price bid for CLEAN. The CLEAN bid item will be paid for the cleaning of all pipe sizes. Payment for CLEAN will be considered full compensation for all work, equipment, and incidentals necessary to clean the pipe in accordance with this note.

SPECIAL NOTE FOR CURED-IN-PLACE PIPE LINING

PART 1 -- GENERAL

1.01 REQUIREMENTS

- A. It is the intent of this specification to provide for the reconstruction of pipelines by the installation of a resin-impregnated flexible tube which is formed to the original conduit and cured to produce a continuous and tight fitting Cured-In-Place Pipe (CIPP). Cured-In-Place Pipe shall be designed for storm water application.
- B. The work specified in this Section includes all labor, materials, accessories, equipment and tools necessary to install and test cured-in-place (CIPP) pipe lining as shown on the Drawings and as specified herein.

1.02 SUBMITTALS

- A. The CONTRACTOR shall submit shop drawings and other information to the ENGINEER for review.
- B. With the bid, the following submittals are required:

Documentation as outlined herein under paragraph 1.06 A, including installation references of projects that are similar in size and scope to this project. The submittal shall include, at a minimum, the client contact name, phone number, and the diameter and footage of pipe rehabilitated. Documentation for product and installation experience must be satisfactory to the ENGINEER.

- C. After contract award, the following submittals are required.
 - 1. The CONTRACTOR shall submit design data and specification data sheets listing all parameters used in the CIPP design and thickness calculations based on ASTM F1216 or F2019 and D2412 for "fully deteriorated gravity pipe conditions." All CIPP liner design calculations shall be sealed and signed by a registered professional Engineer in the Commonwealth of Kentucky. Submit P.E. certification form for all CIPP design data. Submit detailed installation procedures, lining production schedule and location, testing procedures and schedule, quality control procedures, liner curing procedures including heat-up and cool-down rates, curing temperature and duration, and shipping and storage requirements, schedule and procedures. Detailed design calculations as specified herein under paragraph 2.01 Q.
 - 2. Various test results as specified herein under Section 2.03.
 - 3. Documentation as specified herein for the Cure Report under Paragraph 3.08 A.
 - 4. Documentation as specified herein for the Television Survey under Paragraph Section 3.10 Television Survey.
- D. Curing log, including temperatures, pressures, and times during the curing process to document that a proper cure has been achieved. Curing log is to be submitted immediately after the curing is complete for each line segment that is rehabilitated.

1.03 RELATED WORK SPECIFIED ELSEWHERE

A. Special Note for Pipe Cleaning

B. Special Note for CIPP Acceptance Testing

1.04 REFERENCE STANDARDS

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM D638 Standard Test Methods for Tensile Properties of Plastics.
 - 2. ASTM D790 Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
 - 3. ASTM D2412- Standard Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading.
 - 4. ASTM D2990 Standard Test Methods for Tensile, Compressive and Flexural Creep and Creep-Rupture of Plastics.
 - 5. ASTM F1216 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube.
 - 6. ASTM F1743 Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of Cured-in-Place Thermosetting Resin Pipe (CIPP).
 - 7. ASTM F2019 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Pulled in Place Installation of Glass Reinforced Plastic (GRP) Cured-in-Place Thermosetting Resin Pipe (CIPP)
 - 8. ASTM E1252 Standard Practice for General Techniques for Obtaining Infrared Spectra for Qualitative Analysis
- B. Where reference is made to one of the above standards, the revision in effect at the time of bid opening shall apply.

1.05 OUALIFICATIONS

- A. The CONTRACTOR performing the CIPP lining work shall be fully qualified, experienced and equipped to complete this work expeditiously and in a satisfactory manner and shall be certified and/or licensed as an installer by the CIPP manufacturer. Only commercially proven products and installers with substantial track records will be approved. In addition the Contractor shall meet the following requirements:
 - 1. The CONTRACTOR shall have minimum of 10,000 LF of CIPP successfully installed of similar diameter and using the specific method of installation and curing being used.
 - 2. The CONTRACTOR shall submit a certified statement from the manufacturer that he/she is a certified and/or licensed installer of the CIPP lining.
 - 3. A minimum of three clients that the CONTRACTOR has performed this type of work for, including names, phone numbers, linear footage, and a description of the actual work performed.
 - 4. The CONTRACTOR'S superintendent who will perform the work under this section must have at least 3 years of experience and have successfully installed at least 5,000 linear feet 24-inch diameter or greater of the proposed product and curing method.

- B. The CONTRACTOR shall also be capable of providing crews as needed to complete the work without undue delay.
- C. The ENGINEER shall approve or disapprove the CONTRACTOR and/or manufacturer based on the submitted information and a follow up interview, if warranted.
- D. Inspection of the liner may be made by the representative of the ENGINEER after delivery. The liner shall be subject to rejection at any time on account of failure to meet any of the requirements specified, even though sample liner may have been accepted as satisfactory at the place of manufacture. Liner rejected after delivery shall be marked for identification and shall be removed from the job site at once.

1.06 GUARANTEE

A. All CIPP lining placed shall be guaranteed by the CONTRACTOR and manufacturer for a period of one year from the date of final acceptance. During this period, defects discovered in the CIPP lining, as determined by the ENGINEER, shall be removed and replaced in a satisfactory manner by the CONTRACTOR at no cost to the ENGINEER. The ENGINEER may conduct an independent television inspection, at his own expense, of the lining work prior to the completion of the one year guarantee period.

1.07 DELIVERY, STORAGE AND HANDLING

- A. Care shall be taken in shipping, handling and storage to avoid damaging the liner. Extra care shall be taken during cold weather construction. Any liner damaged in shipment shall be replaced as directed by the ENGINEER.
- B. Any liner showing a split or tear, or which has otherwise received damage shall be marked as rejected and removed at once from the job site.
- C. The liner shall be maintained at a proper temperature in refrigerated facilities to prevent premature curing at all times prior to installation. The liner shall be protected from UV light prior to installation. Any liner showing evidence of premature curing will be rejected for use and will be removed from the site immediately.

PART 2 -- PRODUCTS

2.01 CIPP LINING

- A. CIPP lining shall be Insituform by Insituform Technologies, Inliner by Inliner Technologies, Premier Pipe, Blue-Tek by Reline America, or approved equal.
- B. The tube shall consist of one or more layers of absorbent non-woven felt fabric and meet the requirements of ASTM F1216 or ASTM F1743, Section 5. The tube shall be constructed to withstand installation pressures, have sufficient strength to bridge breaks and missing sections of the existing pipe, and stretch to fit irregular pipe sections. The new jointless pipe-within-a-pipe must fit tightly against the old pipe wall and consolidate all disconnected sections into a single continuous conduit, substantially reducing or eliminating infiltration or exfiltration.
- C. The wetout tube shall have a uniform thickness that when compressed at installation pressures will meet or exceed the Design thickness.

- D. The tube shall be fabricated to a size that when installed will tightly fit the internal circumference and length of the original pipe with minimal shrinkage, in such a way as to minimize water migration (tracking) between the liner and the host pipe. Allowance should be made for circumferential stretching during inversion, and longitudinal stretching during pull in. Overlapped layers of felt in longitudinal seams that cause lumps in the final product shall not be utilized.
- E. The minimum tube length shall be that deemed necessary by the Contractor to effectively span the distance between the access points and to facilitate a good, "non-tracking" seal. The Contractor shall verify the lengths in the field before cutting liner to length and otherwise preparing it for installation.
- F. The outside layer of the tube (before wetout) shall be coated with an impermeable, flexible membrane that will contain the resin and facilitate monitoring of resin saturation during the resin impregnation (wetout) procedure.
- G. The tube shall be homogeneous across the entire wall thickness containing no intermediate or encapsulated elastomeric layers. No material shall be included in the tube that may cause delamination in the cured CIPP. No dry or unsaturated layers shall be evident.
- H. The wall color of the interior pipe surface of CIPP after installation shall be a light reflective color so that a clear detailed examination with closed circuit television inspection equipment may be made.
- I. Seams in the tube shall be stronger than the unseamed felt.
- J. The outside of the tube shall be marked for distance at regular intervals along its entire length, not to exceed 5 ft. Such markings shall include the Manufacturers name or identifying symbol. The tubes shall be manufactured in the USA.
- K. The resin system shall be a corrosion resistant polyester, vinyl ester, or epoxy and catalyst system that when properly cured within the tube composite meets the requirements of ASTM F1216 and ASTM F1743, the physical properties herein, and those which are to be utilized in the Design of the CIPP for this project. The resin shall produce CIPP which will comply with the structural and chemical resistance requirements of this specification.
- L. The finished pipe in place shall be fabricated from materials which when cured will be chemically resistant to withstand internal exposure to domestic sewage. All constituent materials will be suitable for service in the environment intended. The final product will not deteriorate, corrode or lose structural strength that will reduce the projected product life. In industrial areas a liner system using epoxy vinyl ester resin shall be utilized and a polyester resin shall be used in non-industrial areas. The ENGINEER shall determine the type of appropriate resin to be utilized for each line segment.
- M. The CIPP shall be designed as per ASTM F1216, Appendix X1. The CIPP design shall assume no bonding to the original pipe wall. The structural performance of the finished pipe must be adequate to accommodate all anticipated loads throughout its design life.
- N. The CIPP must have a minimum design life of fifty (50) years. The minimum design life may be documented by submitting life estimates by national and/or international authorities or specifying agencies. Otherwise, long-term testing and long-term in-service results (minimum ten (10) years) may be used, with the results extrapolated to fifty (50) years.
- O. The CONTRACTOR must have performed long-term testing for flexural creep of the CIPP pipe material installed by his company. Such testing results are to be used to determine the long-term, time dependent flexural modulus to be utilized in the product design. This is a performance test of the materials (tube and resin) and general workmanship of the installation and curing. A percentage of the instantaneous flexural modulus value (as measured by ASTM D-790 testing) will be used in design calculations for external buckling. The percentage, or the long-term creep retention value utilized, will be verified by this testing. Values in excess of 50% will not be applied unless substantiated by

- qualified third party test data. The materials utilized for the contracted project shall be of a quality equal to or better than the materials used in the long-term test with respect to the initial flexural modulus used in design.
- P. The minimum required structural CIPP wall thickness shall be based on the physical and structural properties described herein and in accordance with the design equations in the appendix of ASTM F 1216 or F 2019, and the following design parameters:

Design Safety Factor	2.0	
Retention Factor for Long-Term Flexural Modulus to be used	50 %	
in Design (as determined by Long-Term tests described in		
paragraph 2.03)		
Ovality*	2 %	
Soil Depth (above crown)*	Refer to Contract Plans	
Design Condition	Fully deteriorated	
*Denotes information which can be provided here or in inspection video tapes or project		
construction plans. Multiple line segments may require a table of values.		

- Q. The lining manufacturer shall submit to the ENGINEER for review complete design calculations for the liner, signed and sealed by a Professional Engineer registered in the Commonwealth of Kentucky and certified by the manufacturer as to the compliance of his materials to the values used in the calculations. The buckling analysis shall account for the combination of dead load, live load, hydrostatic pressure and grout pressure (if any). The liner side support shall be considered as if provided by soil pressure against the liner. The existing pipe shall not be considered as providing any structural support. Modulus of soil reaction shall be 1000, corresponding to a moderate degree of compaction of bedding and a fine-grained soil as shown in AWWA Manual M45, Fiberglass Pipe Design.
- R. The layers of the cured CIPP shall be uniformly bonded. It shall not be possible to separate any two layers with a probe or point of a knife blade so that the layers separate cleanly or the probe or knife blade moves freely between the layers. If separation of the layers occurs during testing of field samples, new samples will be cut from the work. Any reoccurrence may cause rejection of the work.
- S. Any layers of the tube that are not saturated with resin prior to insertion into the existing pipe shall not be included in the structural CIPP wall thickness computation.

2.02 END SEALS

A. A watertight seal shall be made at every manhole entrance and exit and all other terminus of the liner. End seals shall be made by using a hydrophilic seal such as Insignia or equal.

2.02 STRUCTURAL REQUIREMENTS FOR MAIN LINES

A. Resin shall be impregnated by vacuum application or approved equal. If reinforcing materials (fiberglass, etc.) are used, the reinforcing material must be fully encapsulated within the resin to assure that the reinforcement is not exposed, either to the inside of the pipe or at the interface of the CIPP and the existing pipe.

B. The design for the CIPP wall thickness will be based on the following strengths, unless otherwise submitted to and approved by the ENGINEER.

Property	Test Method	Cured Composite per ASTM F1216
Flexural Modulus of Elasticity	ASTM D-790	250,000 psi
Flexural Stress	ASTM D-790	4,500 psi

2.03 TESTING REQUIREMENTS

- A. Chemical Resistance The CIPP shall meet the chemical resistance requirements of ASTM F1216 or F2019. CIPP samples for testing shall be of tube and resin system similar to that proposed for actual construction. It is required that CIPP samples with and without plastic coating meet these chemical testing requirements.
- B. Prior to any liner installation, the CONTRACTOR shall submit technical data sheets showing the physical and chemical properties and infrared spectrum analysis per ASTM E1252 (chemical fingerprint) of the proposed resin system as modified for the cured-in-place process. Additionally, copies of the certificates of analysis for resin used on the project must be made available to the ENGINEER.
- C. The CONTRACTOR shall provide resin samples as directed by the ENGINEER during the duration of the project and infrared spectrography chemical fingerprints shall be run and compared to the submitted fingerprint to verify the resin used is the resin submitted for use on this project. These analyses shall be conducted at the ENGINEER's expense.
- D. In the case of liner installation performed under this contract, CIPP samples shall be prepared and physical properties tested in accordance with ASTM F1216, F2019, or ASTM F1743, Section 8, using either method proposed.
 - 1. Where the diameter is less than or equal to 15-inches, the samples shall be restrained type samples made by extending the liner through a form with a diameter as close as possible to the existing pipeline. The formed sample shall be provided with insulation to contain cure heat as well as a heat sink such as sand bags for cool down.
 - 2. Where the diameter is greater than 15-inches, a plate sample shall be prepared. The test sample shall be fabricated from the material taken from the liner and cured in a clamped mold with the resin used in the liner construction placed in the down tube.
 - 3. Each sample shall be large enough to provide at least five total specimens for testing. One thickness, flexural strength, and flexural modulus shall be conducted in accordance with ASTM F1216, ASTM D790, and ASTM D2290 for each segment. The material must meet the initial strength requirements of ASTM F1216, Table 1.
 - 4. These samples will be tested to verify compliance with the installed material specifications and shall be paid for through the testing allowance on the bid form. The CONTRACTOR shall produce these test samples for each pipe segment installed, defined as a contiguous length of insertion. Liners which do not pass these material tests will be rejected. The cost for sample collection shall be included in the bid price for the cured in place pipe.
 - 5. Test specimens shall be marked in indelible ink with the appropriate lateral or main section, work order number, date of installation, and orientation to the top of the pipe (direction of up) so the

- results can be correlated to the field work performed. All test results shall use this designated labeling as a reference.
- 6. The extraction and labeling of test specimens shall be done in the presence of the ENGINEER. The ENGINEER and CONTRACTOR shall, upon completion of sample extraction and labeling, both sign a chain-of-custody form that shall subsequently accompany the sample at all times and shall ultimately be received and signed at the testing laboratory. Test reports shall include a copy of the chain-of-custody form with all signatures to ensure that reported test results are for the correct sample.
- 7. The flexural properties must meet or exceed the values specified herein.
- 8. Wall thickness of samples shall be determined as described in paragraph 8.1.6 of ASTM F1743.
- 9. Visual inspection of the CIPP shall be by closed-circuit television.

PART 3 -- EXECUTION

3.01 CLEANING/SURFACE PREPARATION

A. It shall be the responsibility of the CONTRACTOR to clean the pipeline and to remove all internal debris out of the pipeline in accordance with the Special Note for Pipe Cleaning.

3.02 JOINT, CRACK, ANNULAR SPACE, AND LINER END CHEMICAL SEALING

- A. Prior to cured-in-place liner installation, all active leaks of a magnitude to compromise the integrity of the liner shall be stopped using chemical grout, at no additional cost to the ENGINEER.
- B. Materials used on this Project shall have the following properties: react quickly to form a permanent watertight seal; resultant seal shall be flexible and immune to the effects of wet/dry cycles; non-biodegradable and immune to the effects of acids, and alkalis; component packaging and mixing compatible with field conditions and worker safety; extraneous sealant left inside pipe shall be readily removable; and shall be compatible with the CIPP liner resin system utilized. The chemical sealing materials shall be acrylic resin type and shall be furnished with activators, initiators, inhibitors and any other materials recommended by the manufacturer for a complete grout system. Sealing grout shall be furnished in liquid form in standard manufacturer's containers. Sealing grout shall be AV-100 manufactured by Avanti International or approved equal.
- C. The Contractor shall modify his equipment as necessary to seal the leaks, however both his equipment and sealing method must meet the approval of the ENGINEER prior to use. Extreme caution shall be utilized during leak sealing (pressure) operations in order to avoid damaging the already weakened sewer pipe. If any damage occurs, it shall be repaired at the CONTRACTOR's cost and to the satisfaction of the ENGINEER. Excessive pumping of grout which might plug a service lateral shall be avoided. Any service laterals blocked by the grouting operation shall be cleared immediately by the Contractor.

3.03 FLOW CONTROL

A. Flow control shall be exercised as required to ensure that no flowing water comes into contact with sections of pipe under repair.

3.04 LINER INSTALLATION FOR MAIN LINES AND LATERALS

- A. In presence of ENGINEER, perform a pre-lining CCTV inspection immediately prior to CIPP lining to demonstrate that the pipe is clean and free of roots, grease, sand, rocks, sludge, PACP runners or gushers, pockets of water, or structural impediments that would affect long-term viability of the pipe liner. Obtain ENGINEER's approval of the acceptability of the existing pipe condition prior to installation of CIPP.
- B. The CONTRACTOR shall present to the ENGINEER, for review, a description of his methods for avoiding liner stoppage due to conflict and friction with such points as the manhole entrance and the bend into the pipe entrance. He shall also present plans for dealing with a liner stopped by snagging within the pipe. This information shall be rendered to the ENGINEER in a timely fashion prior to the preconstruction conference.
- C. The CONTRACTOR shall immediately notify the ENGINEER of any construction delays taking place during the insertion operation. Such delays shall possibly require sampling and testing by an independent laboratory of portions of the cured liner at the ENGINEER's discretion. The cost of such test shall be born by the CONTRACTOR and no extra compensation will be allowed. Any failure of sample tests or a lack of immediate notification of delay shall be automatic cause for rejection of that part of the work at the ENGINEER's discretion.
- D. On site wet out (if applicable) The CONTRACTOR shall designate a location where the tube will be impregnated with resin prior to installation. The CONTRACTOR shall allow the ENGINEER and/or ENGINEER to inspect the materials and the "wet-out" procedure.
- E. The materials and processes must be reasonably available for pre-installation, installation and post-installation inspections. Areas which require inspection include, but are not limited to, the following:
 - 1. Product materials should exhibit sufficient transparency to visually verify the quality of resin impregnation.
 - 2. Temperature sensing devices, such as thermocouples, shall be located between the existing pipe and the CIPP to ensure the quality of the cure of the wall laminate.

3.05 LINER INSTALLATION FOR MAIN LINES

- A. (Heat cured) After the inversion is complete, the CONTRACTOR shall supply a suitable heat source throughout the pipeline. The equipment shall be capable of delivering hot water or steam throughout the pipeline to uniformly raise the temperature to a level required to effectively cure the resin. The heat source shall be fitted with suitable monitors to gauge the temperature of the incoming and outgoing water supply or steam. Another such gage shall be placed between the tube and the host pipe at the termination end at or near the bottom to determine the temperatures during cure. Water temperature or steam in the pipe during the cure period shall be as recommended by the resin manufacturer.
- B. Initial cure shall be deemed complete when the exposed portions of the tube appear to be hard and sound and the temperature sensor indicates that the temperature is of a magnitude to realize an exotherm. The cure period shall be of a duration recommended by the resin manufacturer and may require continuous recirculation of the water to maintain the temperature. The CONTRACTOR shall have on hand at all times, for use by his personnel and the ENGINEER, a digital thermometer or other means of accurately and quickly checking the temperature of exposed portions of the liner.
- C. CIPP installation shall be in accordance with ASTM F1216, Section 7, ASTM F1743, Section 6 or ASTM F2019, with modifications as listed herein.
- D. Resin Impregnation: The quantity of resin used for tube impregnation shall be sufficient to fill the volume of air voids in the tube with additional allowances for polymerization shrinkage and the loss of

resin through cracks and irregularities in the original pipe wall. A vacuum impregnation or approved equal process shall be used. To insure thorough resin saturation throughout the length of the felt tube, the point of vacuum shall be no further than 25 feet from the point of initial resin introduction. After vacuum in the tube is established, a vacuum point shall be no further than 75 feet from the leading edge of the resin. The leading edge of the resin slug shall be as near to perpendicular as possible. A roller system shall be used to uniformly distribute the resin throughout the tube. If the Installer uses an alternate method of resin impregnation, the method must produce the same results. Any alternate resin impregnation method must be proven.

- E. Tube Insertion: The wetout tube shall be positioned in the pipeline using either inversion or a pull-in method. If pulled into place, a power winch should be utilized and care should be exercised not to damage the tube as a result of pull-in friction. The tube should be pulled-in or inverted through an existing manhole or approved access point and fully extend to the next designated manhole or termination point.
- F. Temperature gauges shall be placed inside the tube at the invert level of each end to monitor the temperatures during the cure cycle.
- G. Curing shall be in accordance with the manufacturer's recommended cure schedule.
- H. Cooldown: The CONTRACTOR shall cool the hardened pipe to a temperature below 100 F before relieving the hydrostatic head. Cooldown may be accomplished by the introduction of cool water into the inversion standpipe to replace water being pumped out of the manhole. Care should be taken in release of static head so that vacuum will not be developed that could damage the newly installed liner.
- I. Finish: The new pipe shall be cut off in the manhole at a suitable location. The finished product shall be continuous over the length of pipe reconstructed and be free from dry spots, delamination and lifts. Pipe entries and exits shall be smooth, free of irregularities, and watertight. No visible leaks shall be present and the CONTRACTOR shall be responsible for grouting to remove leaks or fill voids between the host pipe and the liner. During the warranty period, any defects which will affect the integrity or strength of the product shall be repaired at the CONTRACTOR's expense, in a manner mutually agreed upon by the ENGINEER and the CONTRACTOR.

3.06 FIELD QUALITY CONTROL

- A. Field acceptance of the liner shall be based on the ENGINEER's evaluation of the installation including TV video and a review of certified test data for the installed pipe samples.
 - 1. Groundwater infiltration of the liner shall be zero.
 - 2. There shall be no evidence of splits, cracks, breaks, lifts, kinks, delaminations or crazing in the liner.
 - 3. If any defective liner is discovered after it has been installed, it shall be removed and replaced with either a sound liner or a new pipe at no additional cost to the ENGINEER.

3.07 ACCEPTANCE

A. The finished liner shall be continuous over the entire length of the installation. The liner shall be free from visual defects, damage, deflection, holes, delamination, uncured resin, and the like. No pinholes, cracks, thin spots, dry spots, or other defects in the liner will be permitted. There shall be no visible infiltration through the liner or from behind the liner at manholes and service connections. Cut-ins and attachments at service connections shall be neat and smooth.

B. Defects, which, in the opinion of the Engineer, will affect the liner's structural integrity, strength, hydraulic performance, future maintenance access, and overall line performance, shall be repaired or the sewer replaced at the Contractor's expense. Any lined section of segment (from manhole to manhole) exhibiting these defects will be rejected for payment until such time repairs have been made to the defective liner to the satisfaction of the Engineer. The following methods of repair shall be implemented by the Contractor to resolve defects unless otherwise approved by the Engineer:

Defects	Repair Method
Annular space or infiltration at lateral opening	Re-seal with structural grout or point repair
Damaged lateral caused by overly ground tap	Repair with structural grout or point repair
Annular space or infiltration at manhole wall and liner termination	Re-grout liner termination
Cracked, missing pipe or voids caused by the cleaning operation	Repair with structural grout, thicken liner, or point repair
Dropped pipe or shape loss caused by the cleaning operation	Point repair
Wrinkles or ridges in liner greater than 5% of the pipe diameter	Grinding allowed if not part of structural component of liner. If grinding would require removal of structural component, then Contractor must make point repair
Re-installed bulkheaded tap or inactive service connection	Re-seal with structural grout or point repair
Lined over debris	Point repair
Soft spots or lifts in the liner	Point repair
Final liner thickness less than required thickness bid	Replace inadequate liner

3.08 WET-OUT AND CURE REPORT

- A. The CONTRACTOR shall submit "wet out" and "cure" reports documenting the specific details of the liner's vacuum impregnation and saturation with resin and the CIPP installation of the liner. A report shall be generated for each liner installation. A copy of all "wet out" and "cure" records shall be made available to the ENGINEER upon request, and shall be turned over to the ENGINEER on a weekly basis and prior to request for payment. If the "wet out" and "cure" reports are not presented prior to a payment request for a repair work order, payment for the work will not be made and the request will be rejected. At a minimum, this report shall include, in addition to CONTRACTOR and Contract identification:
 - 1. Line identification and location
 - 2. Wet-out date
 - 3. Sample identification(s) and technician
 - 4. Installation (in sewer) date
 - 5. Host sewer pipe inside diameter

- 6. Liner thickness
- 7. Liner length
- 8. Liner and resin batch numbers
- 9. Resin type
- 10. Wet out length
- 11. Roller spacing
- 12. Vacuum setting
- 13. Quantity of resin and catalyst utilized
- 14. Wet out technicians
- 15. Time wet out started and completed
- 16. Applicable remarks
- 17. (Heat cure) Boiler and liner heating fluid pressure and temperature versus time log during cure period
- 18. (UV cure) Pressure and temperature versus time log and light train speed during cure period.
- 19. Cool down report

3.09 CLEANUP

A. After the liner installation has been completed and accepted, the CONTRACTOR shall cleanup the entire project area and return the ground cover to the original or better condition. All excess material and debris not incorporated into the permanent installation shall be disposed of by the CONTRACTOR.

3.10 TELEVISION SURVEY

A. Television survey, including Preconstruction Survey, Post Construction Survey, and Warranty Survey, shall be in accordance with Special Note for CIPP Acceptance Testing. Television survey shall be done for all cured-in-place lining, and shall be completed within 2 weeks of liner installation.

PART 4 – PAYMENT

Payment for Cured-in-Place Pipe Liners will be made per linear foot as CURE IN PLACE PIPE LINER 15 IN, CURE IN PLACE PIPE LINER 18 IN, AND CURE IN PLACE PIPE LINER". Lined storm sewer pipes 15 inch will be paid as CURE IN PLACE PIPE LINER 15 IN. Lined storm sewer pipes 18 inch will be paid as CURE IN PLACE PIPE LINER 18 IN. All other pipes required to be lined will be paid the price bid per linear foot for CURE IN PLACE PIPE LINER. Payment for CURE IN PLACE PIPE LINER 15 IN, CURE IN PLACE PIPE LINER 18 IN, and CURE IN PLACE PIPE LINER will be considered full compensation for all work, equipment, and incidentals necessary to install the pipe liners in accordance with this note.

SPECIAL NOTE FOR CIPP ACCEPTANCE TESTING

PART 1 -- GENERAL

1.01 SCOPE OF WORK

- A. Furnish all necessary labor, materials, equipment, services and incidentals required to visually inspect by means of closed-circuit television (CCTV) designated pipe sections including, but not limited to, recording and playback equipment, materials and supplies.
- B. The inspection shall be performed on one section (i.e. curb box inlet to curb box inlet) at a time. The section being inspected shall be suitably isolated from the remainder of the system.
- C. Video recordings shall be made of the television inspections and copies of both the recordings and printed inspection logs shall be supplied to the Engineer.
- D. Contractor may have to perform point repairs, remove obstructions or remove protruding service connections to complete pre-rehabilitation TV inspection.

PART 2 -- PRODUCTS

2.01 EQUIPMENT

A. The television camera used for inspection shall be one specifically designed and constructed for such inspection. Lighting for the camera shall be suitable to allow a clear picture for the entire periphery of the pipe. The camera shall be operative in 100 percent humidity conditions. The camera, television monitor and other components of the video system shall be capable of producing a minimum 500-line resolution color video picture. Picture quality and definition shall be to the satisfaction of the Engineer and if unsatisfactory, inspection shall be performed again with the appropriate changes made as designated by the Engineer at no additional cost to the Engineer. The television inspection equipment shall have an accurate footage counter that shall display on the monitor, the exact distance of the camera from the centerline of the starting manhole.

PART 3 -- EXECUTION

3.01 PROCEDURE

- A. The camera shall be moved through the pipe in either direction at a uniform rate, stopping when necessary to ensure proper documentation of the pipe's condition but in no case will the television camera be pulled at a speed greater than 30 fpm. Manual winches, power winches, TV cable and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the pipe conditions shall be used to move the camera through the line. If, during the inspection operation, the television camera will not pass through the entire section, the equipment shall be removed and repositioned in a manner so that the inspection can be performed from the opposite opening. All set-up costs for the inspection shall be included in the unit prices bid. If the camera fails to pass through the entire section, the Contractor shall perform point repairs as required. Re-clean or further remove blockage at no additional cost to the Engineer.
- B. Whenever non-remote powered and controlled winches are used to pull the television camera through the line, telephones, radios, or other suitable means of communication shall be set up between the two openings of the line being inspected to ensure that good communications exist between members of the crew.

The camera height shall be adjusted such that the camera lens is always centered in the pipe being televised. Flow shall be controlled such that depth of flow shall not exceed 20% of pipe's diameter.

Lighting system shall be adequate for quality pictures.

3.02 RECORDING OF FIELD OBSERVATIONS

A. Television Inspection logs

Printed location records shall be kept which shall clearly show the location. In addition, other data
of significance including joints, unusual conditions, roots, collapsed sections, or presence of scale
and corrosion that the camera failed to pass through and reasons for the failure and other
discernible features shall be recorded and annotated using the PACP system and a copy of such
records shall be supplied to the Engineer.

B. Digital Recordings

- 1. The purpose of digital recording shall be to supply a visual and audio record of areas of interests of the pipe segments that may be replayed by the Engineer. Digital recording playback shall be at the same speed that it was recorded and shall be made in color. The Contractor shall be required to have all digital media and necessary playback equipment readily accessible for review by the Engineer during the project.
- 2. The Contractor shall perform CCTV inspection of each newly installed or rehabilitated pipe segment after testing and before re-introducing any flow into the pipe. Each test shall be witnessed by the Engineer.
- 3. The Contractor shall record each CCTV inspection on a DVD and submit such recordings to the Engineer as a prerequisite for Partial Utilization/Substantial Completion.
- 4. CCTV inspections shall be performed by a PACP certified and trained person.
- 5. Inspections shall include narration that notes the location and type of defects, if any.
- 6. At the completion of the project, the Contractor shall furnish all of the original digital recordings to the Engineer. Each disc shall be labeled as to its contents. Labels shall include the disc number, date televised, sewer segment reach designation, street location, and structure numbers on the disc. The Contractor shall keep a copy of the discs for 30 days after the final payment for the project, at which time the discs may be erased at the Contractor's option.

PART 4 – PAYMENT

Payment for both the video inspection prior to and after the Cured-in-Place Pipe Liners have been installed will be made as one lump sum payment as CIPP ACCEPTANCE TESTING. Payment for CIPP ACCEPTANCE TESTING will be considered full compensation for all work, equipment, and incidentals necessary to perform the video inspection in accordance with this note.

SPECIAL NOTE ALLOWING PVC FOLD AND FORM PIPE LINER

Contractor may elect to use Fold and form pipe liner in accordance with the Special Note for PVC Fold-and-Form Pipe Liner as an alternative to using CIPP Liner as detailed elsewhere in the proposal. Contractor will bid CIPP Liner bid items regardless of which type of liner is actually used. Bid item and requirement for CIPP Acceptance Testing in accordance with Special Note for CIPP Acceptance Testing will still apply regardless of which type of liner is actually used.

SPECIAL NOTE FOR PVC FOLD-AND-FORM PIPE LINER

GENERAL

SUMMARY

Section Includes: Definition of the approved methods and materials to rehabilitate gravity and pressure pipelines by the insertion of a continuously extruded, folded, PVC Fold-and-Form Pipe Liner into a conduit (host pipe), and the "blow-molding" (thermoforming) of the pipe liner to conform to the shape of the existing pipe. The rehabilitated host pipe shall:

Extend continuously from one access point to the next access point with no joints.

Provide a tightly conforming fit against the inner wall of the host pipe.

Provide for complete structural integrity independent of the load-bearing capacity of the host pipe.

Definitions:

PVC Fold-and-Form Pipe Liner: A continuously extruded (joint-less), polyvinyl chloride (PVC) Pipe Liner that is shaped into a reduced form to facilitate insertion into existing pipelines or conduits. The 4" to 12" PVC Fold-and-Form Pipe Liner shall be coiled in a flat shape and folded during insertion; whereas the 15" and larger PVC Fold-and-Form Pipe Liner shall be coiled in an "H" shape. The Pipe Liner shall be designed to return to its extruded, round memory upon application of heat alone and to be formed tightly against the host pipe by "blow molding" (thermoforming) techniques.

Host Pipe: An existing gravity or pressure pipeline or conduit to be internally rehabilitated by installation of the PVC Fold-and-Form Pipe Liner.

REFERENCES

Codes and standards referred to in this Special Note are:

ASTM D 256: Standard Test Methods for Determining the Pendulum Impact Resistance of Notched Specimens of Plastics.

ASTM D 638: Standard Test Method for Tensile Properties of Plastics

ASTM D 790: Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics

ASTM D 1784: Standard Specification for Rigid Polyvinyl Chloride (PVC) Compounds and Chlorinated Polyvinyl Chloride (CPVC) Compounds

ASTM D 2122: Standard Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings

ASTM D 2152: Standard Test Method for Extrusion Quality using Acetone Immersion

ASTM D 2444: Standard Test Method for Impact Strength

ASTM F 1057: Standard Test Method for Extrusion Quality using Heat Reversion

ASTM F 1871: Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit rehabilitation

PIPE DESIGN AND DIMENSION

Submittals: The Contractor shall furnish engineering data covering materials and installation procedures.

The length of the PVC Fold-and-Form Pipe Liner shall be that which is required to effectively carry out the insertion and to seal the PVC Fold-and-Form Pipe Liner at the inlet and outlet access. The product supplier shall be capable of supplying continuous lengths to 100 LF in all applicable diameters to ensure the capability of spanning from the end of the host pipe without excavation.

The PVC Fold-and-Form Pipe Liner shall be supplied to an outside diameter and minimum wall thickness, based on the following project parameters and condition of the existing conduit as viewed in the video. The pipe design shall have sufficient strength to structurally enhance the existing conduit and support all ground water loads imposed. Unless otherwise specified, the Contractor shall determine the minimum and maximum length of liner to effectively span the distance from the inlet to the outlet of the respective pipelines.

SAFETY

The CONTRACTOR shall conform to all safety requirements of pertinent regulatory agencies, and shall secure the site for the working conditions in compliance with the same. The CONTRACTOR shall erect signs and devices as are necessary for the safety of the work site.

The CONTRACTOR shall also provide all of the WORK in accordance with applicable OSHA standards. Emphasis shall be placed upon the requirements for entering confined spaces and working with steam.

PRODUCTS

MATERIAL SPECIFICATIONS:

The PVC Fold-and-Form Pipe Liner will be manufactured from virgin PVC Fold-and-Form Pipe Liner compound, containing no fillers, and meet or exceed the following minimum physical properties:

COMBUSTIBILITY: Self-Extinguishing

FLEXURAL MODULUS: ASTM D 790 145,000 PSI @73F FLEXURAL STRENGTH: ASTM D 790 4,100 PSI @73F IZOD IMPACT: ASTM D 256 15 FT-LB/IN

CHEMICAL RESISTANCE: suitable under general sanitary sewer conditions CHARACTERISTICS: The PVC Fold-and-Form Pipe Liner shall be designed to meet the following installation performance requirements:

The Pipe Liner shall be capable of expanding a full pipe size larger than the nominal diameter (ex: 8" to 10") without splitting, or rupturing.

After being expanded by "blow-molding", the installed Pipe Liner will match the configuration of the host pipe.

The Pipe Liner shall be capable of negotiating pipe line bends in the host pipe without splitting, rupturing, or wrinkling of the pipe liner material.

The pipe liner shall be dimensionally stable immediately after cool-down.

The pipe liner shall have an ASTM D 1784 impact resistance cell classification of no less than five (5), to resist splitting during remote controlled service connection reinstatement.

Processing of the pipe liner shall cause no degradation of the pipe liner physical properties.

MARKINGS: The pipe liner shall be marked at maximum five (5) foot intervals indicating ASTM D 1784 cell classification, manufacturer, and size (diameter and SDR). Each production lot will be uniquely coded.

DIMENSIONS:

The pipe liner outside diameter will be manufactured substantially smaller than the inside diameter of the host pipe. The pipe liner shall be manufactured with sufficient excess wall thickness to allow the pipe liner to meet or exceed the DR requirements after being expanded by "blow-molding".

Standard Dimension Ration (SDR) of the Pipe Liner will be SDR 35, with a resulting DR Range between DR 33 and DR 38. The Pipe Liner will be continuously extruded (no joints) at the factory to the minimum length required to effectively span the distance between access points, in accordance with actual distances which shall be field verified by the Contractor prior to manufacturing.

ACCEPTABLE MANUFACTURERS:

AMLINER PVC Fold-and-Form pipe liner, manufactured by American Pipe & Plastics, Inc. of Binghamton, NY.

DynaLiner Thermoformed PVC Pipeliner, manufactured by DynaLiner, LLC, of Birmingham, Alabama.

Approved Equivalent

MATERIAL TESTING: Each production lot of pipe liner will be inspected and tested at the time of manufacture for defects is accordance with ASTM D 2444, and ASTM D 2152. All pipe liners shall conform to the specified dimensions. Material design properties shall be confirmed in accordance with ASTM D 790.

EXECUTION

HOST PIPE PREPARATION

The existing pipeline shall be cleaned of any obstructions and televised using CCTV immediately prior to installation of the pipe liner. The host pipe condition shall be acceptable to the ENGINEER as appropriate for lining prior to the insertion of the pipe Liner.

Prior to beginning the insertion of the pipe liner, the CONTRACTOR shall confirm that the host pipe is adequately cleaned.

INSTALLATION PROCEDURES:

The pipe liner manufacturer's installation instructions and procedures shall be followed during installation.

Point Repairs

Point repairs and obstruction removals shall be completed, as necessary, in order to enable lining.

Liner Insertion

The entrance to the host pipe shall be covered so as to provide a smooth surface to prevent damage to the Pipe Liner.

The Pipe Liner shall be positioned to enable it to naturally curve into the access point and the host pipe.

The insertion end of the Pipe Liner shall be sealed to inhibit fluids and solids form entering the lumen of the Pipe Liner.

Insert the Pipe Liner into the entry access point. Slowly feed the Pipe Liner from the supply reel, while simultaneously pulling the Pipe Liner at the exit access point, to minimize tension on the Pipe Liner. Maintain two-way communication between personnel at entry and exit access points to coordinate the rate of Pipe Liner supply and pulling operations.

Use a power winch and a steel cable connected to the pulling head as recommended by the manufacturer to advance the Pipe Liner.

Pipe Liner Processing and "Blow-Molding":

Process and "blow-mold" the PVC Fold and-Form Pipe Liner in accordance with the manufacturer's instructions for heating and expanding the Pipe Liner. Upon completion of processing and "blow-molding", the Pipe Liner shall fit tightly against the inside wall of the host pipe, be locked into the joints of the host pipe. Temperature and pressure gauges shall be used at the insertion and termination access points to monitor internal conditions during Pipe Liner processing and "blow-molding".

Introduce superheated, pressurized steam to heat and relax the Pipe Liner in strict accordance with the recommendations of the Pipe Liner manufacturer.

Continue the application of superheated steam while introducing compressed air to increase internal pressure on the Pipe Liner as recommended by the manufacturer. DO NOT ALLOW PRESSURE TO EXCEED 12 PSI, AS DAMAGE MAY OCCUR TO HOST PIPE.

Discontinue the use of superheated steam while continuing the use of compressed air to maintain the internal pressure. Allow the Pipe Liner to cool below $100~\rm F$ before releasing pressure.

Liner Termination:

During the pulling in place and "blow-molding" process, the PVC liner shall be peeled back and folded across the face of the existing connection flange or flange adapter, as to create a flanged ending for the PVC Liner.

After cool down has occurred, the Contractor shall carefully proceed to drill the flange bolt pattern onto the PVC Liner without cracking or deteriorating the liner.

The PVC Liner flanged termination shall have a minimum thickness equal to a SDR of 35.

SPECIAL NOTE ON BRIDGE REPAIR CONTRACTS

PENETRATING HEALER SEALER ON BRIDGE DECK

I. DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this note, and the attached detail drawings. Section references are to the Standard Specifications.

The Contractor shall prepare and treat the concrete bridge deck with a healer sealer epoxy system in accordance with these specifications in reasonably close conformity with the plans, the manufacturer's recommendations and as directed by the Engineer.

This work consists of: (1) provide all labor, materials and equipment required to prepare, clean and apply a penetrating epoxy healer/sealer system to the concrete bridge decks; and (2) Any other work specified as part of this contract.

The Contractor shall provide to the Engineer written documentation from the epoxy healer/sealer manufacturer that outlines the recommended surface preparation, application techniques, and application rates. The Contractor shall arrange to have a technical representative on site to provide mixing proportions equipment suitability, and safety advice to the Contractor and Engineer. Any conflict with these provisions and representative's advice shall be resolved at the job site. The technical representative shall remain at the job site until such time as he and the Engineer agree that the Contractor is qualified in all aspects of the application of the sealer.

This work item shall not be performed during the period beginning November 1st and ending March 31st.

II. MATERIALS. Select a two component epoxy based healer sealer epoxy system from the following list:

Product	Supplier	Telephone
Bridge Seal	Unitex	800-821-5846
Dural 335	Euclid Chemical	800-321-7628
Sikadur 55 SLV	Sika Corporation	800-933-7452

Aggregate Sieve Size	% Passing Max.
4.5mm (#4)	100
2.36mm (#8)	90 - 100
850um (#20)	5 - 15
300um (#50)	0 - 5

The aggregate shall be angular, having less than 0.2 percent moisture, and free of dirt, clay, asphalt, and other foreign or organic materials. Aggregate shall meet the grading limits shown above or per manufacturer's recommendations and approved by the Engineer.

III. EQUIPMENT. For the epoxy healer sealer, the mixing and application systems shall be capable of accurately blending the epoxy resin and hardening agent, and shall uniformly and accurately apply the epoxy materials at the specified rate to the bridge deck in such a manner as to cover 100 percent of the work area.

The fine aggregate spreader shall be propelled in such a manner as to uniformly and accurately apply dry aggregate to excess onto the applied epoxy material. The vacuum truck shall be self-propelled to remove excess debris and aggregate.

For hand applications, equipment shall consist of calibrated containers, a paddle type mixer, notched squeegees, and stiff bristle brooms, suitable for mixing and applying the epoxy and aggregate.

IV. CONSTRUCTION.

Surface Preparation. Before application of the healer sealer, clean the entire deck surface by shotblasting to remove asphaltic material, oils dirt, rubber curing compounds, paint carbonation, laitance, weak surface mortar and other detrimental materials, which may interfere with the bonding or curing of the healer sealer. The prepared deck surface shall conform to requirements described in the International Concrete Repair Institute Guideline No. 03732, Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays, concrete surface profile 3 (CSP 3). Remove all paint lines. A vacuum or oil-free moisture-free air blast is required to remove all dust and other loose material as directed by the Engineer.

Repair any structurally unsound surfaces, weak sections or spalled areas as directed by the Engineer with a concrete patch material that is compatible with the epoxy sealer system before applying any sealer. Do not apply the healer sealer system on new concrete deck patches until approved by the Engineer. The Department will not measure concrete patching for payment and will consider it incidental to the bid item being patched. Patching and cleaning operations shall be inspected and approved prior to placing the sealer. Any contamination of the deck, or to intermediate courses, after initial cleaning, shall be removed.

There shall be no visible moisture present on the surface of the concrete at the time of application of the epoxy overlay tested in accordance with ASTM D4263.

During preparation of the surface, the expansion joints, and any other areas not to be sealed, shall be protected from damage as approved by the Engineer. The protection shall be removed once the epoxy and aggregate has been applied and prior to initial set.

Application. The epoxy manufacturer representative shall be on site during installation to ensure that all preparation and application is done according to their requirements. Apply the healer sealer and aggregate according to the manufacturer's recommendations and as directed by the Engineer. After the healer sealer has attained initial set, remove the excess aggregate, unless otherwise directed by the on site epoxy manufacturers representative. The Contractor shall take all steps necessary to prevent the material from flowing into lanes open to traffic and prevent the sealer from leaking through cracks onto persons, traffic, and property. If deck preparation procedures or the sealer deface the appearance of bridge components other than the sealed areas, repair those components at no additional cost to the Department.

V. MEASUREMENT and PAYMENT. Payment for this item of work shall be at the contract unit price and payment will be full compensation for the following: (1) provide all labor, materials and equipment required to prepare, clean and apply a penetrating epoxy healer/sealer system to the concrete bridge decks and sidewalk; and (2) Any other work specified as part of this contract and the attached detail drawings.

The completed work as described will be paid for at the contract unit price for the following contract item (pay item):

Contract Item (Pay Item)

Pay Unit

Epoxy Healer/Sealer - Bridge Deck

Square Yard

The Department will consider payment as full compensation for all work required by this note and the attached detail drawings.

INTERSTATE 75 PAVEMENT REHABILITATION PROJECT M.P. 50.76 TO M.P. 52.05 ITEM # 8-2022.0 PUBLIC INFORMATION PLAN

The primary goal of the Public Information Plan (PIP) is to inform the motoring public and area stakeholders of project information including Maintenance of Traffic (MOT) which includes lane closures. The KYTC District 8 Public Information Officer (PIO) will coordinate and disseminate to stakeholders and the media appropriate information regarding the construction plans.

LOCAL STAKEHOLDERS

- Elected Officials
 - o State Representative Jonathan Shell (859) 792-4161; <u>Jonathan.Shell@lrc.ky.gov</u>
 - o State Senator Jared Carpenter (502) 564-8100; <u>Jared.Carpenter@lrc.ky.gov</u>
 - o Rockcastle Co. Judge Executive Doug Bishop (606) 256-2856; rockcastlejudge@windstream.net
 - o Rockcastle Co. Sheriff Mike Peters (606) 256-2032; rocksheriffdept@alltel.net
- Local Agencies
 - o Rockcastle Co. Emergency Management Howell Holbrook, Jr. (606) 256-8436; holbrookhh@windstream.net
- State & Federal Agencies
 - o KSP London Post Lloyd Cochran (606) 878-6622; <u>Lloyd.Cochran@ky.gov</u>
 - o Kentucky Transportation Operations Center (511.ky.gov) 502-564-2080
 - o KY Over Dimensional Permits Virgie Long virgie.long@ky.gov
- Utility Companies
 - Not Applicable

TRUCKING FIRMS AND OUT OF STATE STAKEHOLDERS

Information will be distributed electronically to trucking firms via Rick Taylor at the Department of Vehicle Regulation (502-564-4540; <u>rick.taylor@ky.gov</u>). Information will also be posted on the 511 website (<u>www.511.ky.gov</u>) and on the 511 telephone information system.

PRESENTATIONS

A project description including anticipated schedule will be provided to the media, stakeholders and other emergency service agencies via e-mail prior to construction. Information will be provided to these groups via traffic advisories, press releases and the District 8 website.

MEDIA RELATIONS

The District PIO will prepare an initial news release regarding the contract award for the project. The PIO will conduct interviews with the media throughout the project duration to keep the public informed of construction progress. Traffic advisories will be submitted to the media when a change in the MOT occurs. The contractor must provide to the PIO via the Resident Engineer notification of any change in the MOT at least three (3) days prior to the change.

	Right-of-Way Cei	tification	Form	Revised 2/22/11
√ Fed	deral Funded	✓ Original		
Sta	te Funded	Re-Cert	ification	
Interstate, Appalach projects that fall und apply, KYTC shall re	completed and submitted to FHWA with the completed and submitted to FHWA with the completed and submit the completed and retained this form shall be completed and retained the complet	so be submitted ere in this form. nstruction contra	to FHWA for <u>all</u> federal- When Condition No. 2 c oct Award. For all other	
Date: July 16, 20	215			
Project Name:	Mill and Thin Overlay	Letting Date	August 21, 2015	
Project #:	FD52 102 0075 050-053	County:	Rockcastle	
Item #:	08-2022.00	Federal #:	NHPP IM 0752 (091)	
Description of P	roject: Mill and Thin Overlay on Southbound I- 1.283 Miles North of the Laurel/Rockca			767) to
The propose properties to improvement	quire NO new or additional righted transportation improvement will be built be acquired, individuals, families, and be not to be removed as a part of this project quire new or additional right-of-	It within the exist usinesses ("reloc :.	ing rights-of -way and the catees") to be relocated,	nere are no , or
sanitary hou accordance Relocation / those that a Condition been account buright-of-possess	a 635.309, the KYTC hereby certify that all using or that KYTC has made available to with the provisions of the current FHWA Assistance Program and that at least one pply.) Ion 1. All necessary rights-of-way, included including legal and physical possest legal possession has been obtained. Toway, but all occupants have vacated the sion and the rights to remove, salvage, or value has been paid or deposited with the	relocatees aded directive(s) cove of the following ing control of accession. Trial or a here may be sor lands and improved demolish all imp	uate replacement house ring the administration of three conditions has been cess rights when applicate ppeal of cases may be ne improvements remain vements, and KYTC has	ing in of the Highway en met. (Check able, have pending in ning on the s physical
to use a appeal of been ob vacated improve	on 2. Although all necessary rights-of-wall rights-of-way required for the proper exof some parcels may be pending in court otained, but right of entry has been obtain and KYTC has physical possession and ements. Fair market value has been paid value for all pending parcels will be paid or	ecution of the pr and on other par ed, the occupant I right to remove, I or deposited with	oject has been acquired cels full legal possessions of all lands and improsalvage, or demolish a the court for most par	I. Trial or on has not vements have II cels. Fair

Note 1: The KYTC shall re-submit a right-of-way certification form for this project prior to AWARD of all Federal-Aid construction contracts. Award must not to be made until after KYTC has obtained full legal possession and fair market value for all parcels has been paid or deposited with the court and FHWA has concurred in the re-submitted right-of-way certification.

construction contract. (See note 1 below.)

Right-of-Way Certification Form

Revised 2/22/11

Condition 3. The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. However, <u>all remaining occupants</u> have had replacement housing made available to them in accordance with 49 CFR 24.204. The KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary rights-of-way will not be fully acquired, and/or some occupants will not be relocated, and/or the fair market value will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction. A full explanation and reason for this request, including identification of each such parcel and dates on which acquisitions, payments, and relocations will be completed, is attached to this certification form for FHWA concurrence. (See note 2.)

Note 2: The KYTC may request authorization on this basis only in unique and unusual circumstances. Proceeding to bid letting shall be the exception and never become the rule. In all cases, the KYTC shall make extraordinary efforts to expedite completion of the acquisition, payment for all affected parcels, and the relocation of all relocatees prior to AWARD of all Federal-Aid construction contracts or force account construction.

Approved:

Charles Hale

Printed Name

Signature

Right-of-Way Supervisor

Signature

KYTC, Director of ROW &Utilities

No Signature Required
as per FHWA - KYTC

Printed Name

Printed Name

Printed Name

Right-of-Way Supervisor

FHWA, ROW Officer (when applicable)

Right-of-Way Certification Form

Revised 2/22/11

Date: Jul	y 16, 2	015				
Project #:		Mill and Thin Overlay FD52 102 0075 050-053 08-2022.00 August 21, 2015		County: Federal #;	Rockcastle NHPP IM 0752 (091)	
This project be relocated	has <u>0</u> , as we	total num l as <u>0</u> to	aber of parcels to be acquired tal number of businesses to	d, and <u>0</u> toto be relocated.	al number of in	dividuals or families to
		have been a	red by a signed fee simple on acquired by IOJ through cond			•
	Parcels	have been a	en acquired at this time (exp acquired or have a "right of e the court (explain below for	ntry" but fair ma		not been paid or has not
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Parcel #	Nam	e/Station	Explanation for delay relocation, or delayed pa			Proposed date of payment or of relocation
There	0	hillhande	matrian 0		inat	
			and/or $\frac{0}{}$ cemeteries involved and/or $\frac{0}{}$ cemeteries involved and on parcels $$ sibility of the project contract			All have been
		Date: April				

ast Revised: February 22, 2011

UTILITIES AND RAIL CERTIFICATION NOTE

ROCKCASTLE COUNTY MILL AND ASPHALT OVERLAY MP 50.767 TO MP 52.02 (I 75) 8-2022.00

GENERAL PROJECT NOTE ON UTILITY PROTECTION

Utility coordination efforts determined that no significant utility relocation work is required to complete the project. Any work pertaining to these utility facilities is defined in the bid package and is to be carried out as instructed by the Kentucky Transportation Cabinet. The contractor will be responsible for any coordination or adjustments that are discussed or quantified in the proposal.

NOTE: DO NOT DISTURB THE FOLLOWING UTILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS

N/A

The Contractor is fully responsible for protection of all utilities listed above

THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

N/A

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE COMPANY OR THE COMPANY'S SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

N/A

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT

N/A

THE FOLLOWING RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

No Rail Involved

Minimal Rail Involved (See Below)

Rail Involved (See Below)

UTILITIES AND RAIL CERTIFICATION NOTE

ROCKCASTLE COUNTY
MILL AND ASPHALT OVERLAY MP 50.767 TO MP 52.02 (I 75)
8-2022.00

<u>SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES</u>

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

BEFORE YOU DIG

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.

Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2012 and Standard Drawings, Edition of 2012 with the 2012 Revision.

Every con KRS Sect	ne 1st paragraph with the following: poration doing business with the Department shall submit evidence of compliance with
Every con KRS Sect 220, and	poration doing business with the Department shall submit evidence of compliance with
KRS Sect 220, and	
220, and	ione $1/\Delta$ $A_{-}010/271R$ $11_{-}010/271R$ $11_{-}070/271R$ $11_{-}080/271R$ $5_{-}010$ and $271R$ 16_{-} 1
	ions 14A.4-010, 271B.11-010, 271B.11-070, 271B.11-080, 271B.5-010 and 271B.16-file with the Department the name and address of the process agent upon whom process
\vdash	aims Resolution Process.
	references to TC 63-34 and TC 63-44 from the subsection as these forms are no longer
	through the forms library and are forms generated within the AASHTO SiteManager
software.	unough the forms notary and are forms generated within the AASITTO SiteManager
	econstruction Conference.
) Staking with the following:
_	g (designated by a Professional Engineer or Land Surveyor licensed in the
	wealth of Kentucky.
Subsection: 109.07.02	•
	m Crushed Aggregate Used for Embankment Stabilization to the following:
	Aggregate
	or Stabilization of Unsuitable Materials
	or Embankment Stabilization
	e following item from the table.
	Sandstone Base (Cement Treated)
	emobilization.
	ne first part of the first sentence of the second paragraph with the following:
_	ll work and operations necessary to accomplish final clean-up as specified in the first
	of Subsection 105.12;
1 0 1	Project Traffic Coordinator (PTC).
	ne last paragraph of this subsection with the following:
_	e designated PTC has sufficient skill and experience to properly perform the task
	and has successfully completed the qualification courses.
	Diversions (By-Pass Detours).
	following sentence after the 2nd sentence of this subsection.
	rtment will not measure temporary drainage structures for payment when the contract
	s provide the required drainage opening that must be maintained with the diversion.
	orary drainage structures shall be incidental to the construction of the diversion. If the
contract d	ocuments fail to provide the required drainage opening needed for the diversion, the
cost of th	e temporary drainage structure will be handled as extra work in accordance with section
109.04.	
Subsection: 201.03.01	Contractor Staking.
	ne first paragraph with the following: Perform all necessary surveying under the
general si	pervision of a Professional Engineer or Land Surveyor licensed in the Commonwealth
of Kentuc	

Subsections	201.04.01 Contractor Staking.
Revision:	_
Revision:	Replace the last sentence of the paragraph with the following: Complete the general layout of
	the project under the supervision of a Professional Engineer or Land Surveyor licensed in the
G 1 4	Commonwealth of Kentucky.
202200000	206.04.01 Embankment-in-Place.
Revision:	Replace the fourth paragraph with the following: The Department will not measure suitable
	excavation included in the original plans that is disposed of for payment and will consider it
	incidental to Embankment-in-Place.
	208.02.01 Cement.
Revision:	Replace paragraph with the following:
	Select Type I or Type II cement conforming to Section 801. Use the same type cement
	throughout the work.
	208.03.06 Curing and Protection.
Revision:	Replace the fourth paragraph with the following:
	Do not allow traffic or equipment on the finished surface until the stabilized subgrade has cured
	for a total of 7-days with an ambient air temperature above 40 degrees Fahrenheit. A curing day
	consists of a continuous 24-hour period in which the ambient air temperature does not fall below
	40 degrees Fahrenheit. Curing days will not be calculated consecutively, but must total seven (7)
	, 24-hour days with the ambient air temperature remaining at or above 40 degrees Fahrenheit
	before traffic or equipment will be allowed to traverse the stabilized subgrade. The Department
	may allow a shortened curing period when the Contractor requests. The Contractor shall give the
	Department at least 3 day notice of the request for a shortened curing period. The Department
	will require a minimum of 3 curing days after final compaction. The Contractor shall furnish
	cores to the treated depth of the roadbed at 500 feet intervals for each lane when a shortened
	curing time is requested. The Department will test cores using an unconfined compression test.
	Roadbed cores must achieve a minimum strength requirement of 80 psi.
Subsection:	208.03.06 Curing and Protection.
Revision:	Replace paragraph eight with the following:
	At no expense to the Department, repair any damage to the subgrade caused by freezing.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Revision:	Revise Seed Mix Type I to the mixture shown below:
	50% Kentucky 31 Tall Fescue (Festuca arundinacea)
	35% Hard Fescue (Festuca (Festuca longifolia)
	10% Ryegrass, Perennial (Lolium perenne)
	5% White Dutch Clover (Trifolium repens)
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Number:	2)
Revision:	Replace the paragraph with the following:
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed
	mix Type II at a minimum application rate of 100 pounds per acre. If adjacent to a golf course
	replace the crown vetch with Kentucky 31 Tall Fescue.

	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Number:	3)
Revision:	Replace the paragraph with the following:
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and 12.
	Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent to
	crop land or golf course, replace the Sericea Lespedeza with Kentucky 31 Fescue.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	B) Procedures for Permanent Seeding.
Revision:	Delete the first sentence of the section.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	B) Procedures for Permanent Seeding.
Revision:	Replace the second and third sentence of the section with the following:
	Prepare a seedbed and apply an initial fertilizer that contains a minimum of 100 pounds of
	nitrogen, 100 pounds of phosphate, and 100 pounds of potash per acre. Apply agricultural
	limestone to the seedbed when the Engineer determines it is needed. When required, place
	agricultural limestone at a rate of 3 tons per acre.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	D) Top Dressing.
Revision:	Change the title of part to D) Fertilizer.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	D) Fertilizer.
Revision:	Replace the first paragraph with the following:
	Apply fertilizer at the beginning of the seeding operation and after vegetation is established. Use
	fertilizer delivered to the project in bags or bulk. Apply initial fertilizer to all areas prior to the
	seeding or sodding operation at the application rate specified in 212.03.03 B). Apply 20-10-10
	fertilizer to the areas after vegetation has been established at a rate of 11.5 pounds per 1,000
	square feet. Obtain approval from the Engineer prior to the 2nd fertilizer application. Reapply
	fertilizer to any area that has a streaked appearance. The reapplication shall be at no additional
	cost to the Department. Re-establish any vegetation severely damaged or destroyed because of
	an excessive application of fertilizer at no cost to the Department.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	D) Fertilizer.
Revision:	Delete the second paragraph.
Subsection:	212.04.04 Agricultural Limestone.
Revision:	Replace the entire section with the following:
	The Department will measure the quantity of agricultural limestone in tons.
Subsection:	212.04.05 Fertilizer.
Revision:	Replace the entire section with the following:
	The Department will measure fertilizer used in the seeding or sodding operations for payment.
	The Department will measure the quantity by tons.

Subsections	212.05 PAYMENT.		
Revision:			
Revision:	Delete the following item code:		
	Code Pay Item Pay Unit 05966 Topdressing Fertilizer Ton		
Subsection:	05966 Topdressing Fertilizer Ton 212.05 PAYMENT.		
Revision:			
Revision:	Add the following pay items:		
	Code Pay Item Pay Unit 05963 Initial Fertilizer Ton		
	05963 Initial Fertilizer Ton 05964 20-10-10 Fertilizer Ton		
Cubaaatiana	5		
	213.03.02 Progress Requirements.		
Revision:	Replace the last sentence of the third paragraph with the following: Additionally, the		
	Department will apply a penalty equal to the liquidated damages when all aspects of work are not		
C1	coordinated in an acceptable manner within 7 calendar days after written notification.		
	213.03.05 Temporary Control Measures.		
Part:	E) Temporary Seeding and Protection.		
Revision:	Delete the second sentence of the first paragraph.		
Subsection: Table:	304.02.01 Physical Properties.		
	Required Geogrid Properties Penlage all references to Test Method "CPL CC2 87" with ASTM D 7727		
Revision:	Replace all references to Test Method "GRI-GG2-87" with ASTM D 7737.		
	402.03.02 Contractor Quality Control and Department Acceptance.		
Part:	B) Sampling.		
Revision:	Replace the second sentence with the following:		
	The Department will determine when to obtain the quality control samples using the random-		
	number feature of the mix design submittal and approval spreadsheet. The Department will		
	randomly determine when to obtain the verification samples required in Subsections 402.03.03 and 402.03.04 using the Asphalt Mixture Sample Random Tonnage Generator.		
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.		
Part:	D) Testing Responsibilities.		
Number:	3) VMA.		
Revision:			
KCVISIOII.	Add the following paragraph below Number 3) VMA:		
	Retain the AV/VMA specimens and one additional corresponding G_{mm} sample for 5 working		
	days for mixture verification testing by the Department. For Specialty Mixtures, retain a mixture		
	sample for 5 working days for mixture verification testing by the Department. When the		
	Department's test results do not verify that the Contractor's quality control test results are within		
	the acceptable tolerances according to Subsection 402.03.03, retain the samples and specimens		
Subsection:	from the affected sublot(s) for the duration of the project. 402.03.02 Contractor Quality Control and Department Acceptance.		
Subsection: Part:	D) Testing Responsibilities.		
Number:	4) Density.		
Revision:	Replace the second sentence of the Option A paragraph with the following:		
Wealenn:	Perform coring by the end of the following work day.		
	1 CHOITH COINING BY THE CHU OF THE TOHOWING WOLK CLAY.		

402.03.02 Contractor Quality Control and Department Acceptance. **Subsection:** D) Testing Responsibilities. Part: Number: 5) Gradation. **Revision:** Delete the second paragraph. 402.03.02 Contractor Quality Control and Department Acceptance. **Subsection:** H) Unsatisfactory Work. Part: Number: 1) Based on Lab Data. **Revision:** Replace the second paragraph with the following: When the Engineer determines that safety concerns or other considerations prohibit an immediate shutdown, continue work and the Department will make an evaluation of acceptability according to Subsection 402.03.05. 402.03.03 Verification. **Subsection: Revision:** Replace the first paragraph with the following: **402.03.03 Mixture Verification.** For volumetric properties, the Department will perform a minimum of one verification test for AC, AV, and VMA according to the corresponding procedures as given in Subsection 402.03.02. The Department will randomly determine when to obtain the verification sample using the Asphalt Mixture Sample Random Tonnage Generator. For specialty mixtures, the Department will perform one AC and one gradation determination per lot according to the corresponding procedures as given in Subsection 402.03.02. However, Department personnel will not perform AC determinations according to KM 64-405. The Contractor will obtain a quality control sample at the same time the Department obtains the mixture verification sample and perform testing according to the procedures given in Subsection 402.03.02. If the Contractor's quality control sample is verified by the Department's test results within the tolerances provided below, the Contractor's sample will serve as the quality control sample for the affected sublot. The Department may perform the mixture verification test on the Contractor's equipment or on the Department's equipment. 402.03.03 Verification. **Subsection:** Part: A) Evaluation of Sublot(s) Verified by Department. Replace the third sentence of the second paragraph with the following: **Revision:** When the paired t-test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate. **Subsection:** 402.03.03 Verification. B) Evaluation of Sublots Not Verified by Department. Part:

Revision: Replace the third sentence of the first paragraph with the following:

When differences between test results are not within the tolerances listed below, the Department will resolve the discrepancy according to Subsection 402.03.05.

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Cubacations	402.03.03 Verification.
Part:	
	B) Evaluation of Sublots Not Verified by Department.
Revision:	Replace the third sentence of the second paragraph with the following:
	When the F -test or t -test indicates that the Contractor's data and Department's data are possibly
	not from the same population, the Department will investigate the cause for the difference
	according to Subsection 402.03.05 and implement corrective measures as the Engineer deems
	appropriate.
	402.03.03 Verification.
Part:	C) Test Data Patterns.
Revision:	Replace the second sentence with the following:
	When patterns indicate substantial differences between the verified and non-verified sublots, the
	Department will perform further comparative testing according to subsection 402.03.05.
	402.03 CONSTRUCTION.
Revision:	Add the following subsection: 402.03.04 Testing Equipment and Technician Verification.
	For mixtures with a minimum quantity of 20,000 tons and for every 20,000 tons thereafter, the
	Department will obtain an additional verification sample at random using the Asphalt Mixture
	Sample Random Tonnage Generator in order to verify the integrity of the Contractor's and
	Department's laboratory testing equipment and technicians. The Department will obtain a
	mixture sample of at least 150 lb at the asphalt mixing plant according to KM 64-425 and split it
	according to AASHTO R 47. The Department will retain one split portion of the sample and
	provide the other portion to the Contractor. At a later time convenient to both parties, the
	Department and Contractor will simultaneously reheat the sample to the specified compaction
	temperature and test the mixture for AV and VMA using separate laboratory equipment
	according to the corresponding procedures given in Subsection 402.03.02. The Department will
	evaluate the differences in test results between the two laboratories. When the difference
	between the results for AV or VMA is not within ± 2.0 percent, the Department will investigate
	and resolve the discrepancy according to Subsection 402.03.05.
Subsection:	402.03.04 Dispute Resolution.
Revision:	Change the subsection number to 402.03.05.
Subsection:	402.05 PAYMENT.
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures
Table:	AC
Revision:	Replace the Deviation from JMF(%) that corresponds to a Pay Value of 0.95 to ±0.6.
Subsection:	403.02.10 Material Transfer Vehicle (MTV).
Revision:	Replace the first sentence with the following:
	In addition to the equipment specified above, provide a MTV with the following minimum
	characteristics:
Subsection:	412.02.09 Material Transfer Vehicle (MTV).
Revision:	Replace the paragraph with the following:
	Provide and utilize a MTV with the minimum characteristics outlined in section 403.02.10.
	2.10.100 and sample a 1/11 , what are imministrated enductoristics outlined in section 103.02.10.

	412.03.07 Placement and Compaction.
Revision:	Replace the first paragraph with the following:
	Use a MTV when placing SMA mixture in the driving lanes. The MTV is not required on ramps
	and/or shoulders unless specified in the contract. When the Engineer determines the use of the
	MTV is not practical for a portion of the project, the Engineer may waive its requirement for that
	portion of pavement by a letter documenting the waiver.
	412.04 MEASUREMENT.
Revision:	Add the following subsection:
	412.04.03. Material Transfer Vehicle (MTV). The Department will not measure the MTV for
	payment and will consider its use incidental to the asphalt mixture.
	501.03.05 Weather Limitations and Protection.
Revision:	Replace the reference to Subsection 501.03.19 in Paragraph 5, with Subsection 501.03.20.
	501.03.19 Surface Tolerances and Testing Surface.
Part:	B) Ride Quality.
Revision:	Add the following to the end of the first paragraph:
	The Department will specify if the ride quality requirements are Category A or Category B when
	ride quality is specified in the Contract. Category B ride quality requirements shall apply when
	the Department fails to classify which ride quality requirement will apply to the Contract.
	603.03.06 Cofferdams.
Revision:	Replace the seventh sentence of paragraph one with the following:
	Submit drawings that are stamped by a Professional Engineer licensed in the Commonwealth of
	Kentucky.
	605.03.04 Tack Welding.
Revision:	Insert the subsection and the following:
	605.03.04 Tack Welding. The Department does not allow tack welding.
	606.03.17 Special Requirements for Latex Concrete Overlays.
Part:	A) Existing Bridges and New Structures.
Number:	1) Prewetting and Grout-Bond Coat.
Revision:	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge
	decks prepared by hydrodemolition.
	609.03 Construction.
Revision:	Replace Subsection 609.03.01 with the following:
	609.03.01 A) Swinging the Spans. Before placing concrete slabs on steel spans or precast
	concrete release the temporary erection supports under the bridge and swing the span free on its
	supports.
	609.03.01 B) Lift Loops. Cut all lift loops flush with the top of the precast beam once the beam
	is placed in the final location and prior to placing steel reinforcement. At locations where lift
	loops are cut, paint the top of the beam with galvanized or epoxy paint.

Subsection:	611.03.02 Precast Unit Construction.
Revision:	Replace the first sentence of the subsection with the following:
ic vision.	Construct units according to ASTM C1577, replacing Table 1 (Design Requirements for
	Precast Concrete Box Sections Under Earth, Dead and HL-93 Live Load Conditions) with
	KY Table 1 (Precast Culvert KYHL-93 Design Table), and Section 605 with the following
	exceptions and additions:
Subsection:	613.03.01 Design.
Number:	2)
Revision:	Replace "AASHTO Standard Specifications for Highway Bridges" with "AASHTO LRFD
ic vision.	Bridge Design Specifications"
Subsection:	615.06.02
Revision:	Add the following sentence to the end of the subsection.
ic vision.	The ends of units shall be normal to walls and centerline except exposed edges shall be beveled
	34 inch.
Subsection:	615.06.03 Placement of Reinforcement in Precast 3-Sided Units.
Revision:	Replace the reference of 6.6 in the section to 615.06.06.
Subsection:	615.06.04 Placement of Reinforcement for Precast Endwalls.
Revision:	Replace the reference of 6.7 in the section to 615.06.07.
Subsection:	615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units.
Revision:	Replace the subsection with the following:
ite vision.	Tension splices in the circumferential reinforcement shall be made by lapping. Laps may not be
	tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall
	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO
	2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall
	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO
	2012 Bridge Design Guide Section 5.11.6.2. The overlap of welded wire fabric shall be measured
	between the outer most longitudinal wires of each fabric sheet. For deformed billet-steel bars,
	the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section
	5.11.2.1. For splices other than tension splices, the overlap shall be a minimum of 12" for welded
	wire fabric or deformed billet-steel bars. The spacing center to center of the circumferential wires
	in a wire fabric sheet shall be no less than 2 inches and no more than 4 inches. The spacing
	center to center of the longitudinal wires shall not be more than 8 inches. The spacing center to
	center of the longitudinal distribution steel for either line of reinforcing in the top slab shall be
	not more than 16 inches.
Subsection:	615.06.07 Laps, Welds, and Spacing for Precast Endwalls.
Revision:	Replace the subsection with the following:
	Splices in the reinforcement shall be made by lapping. Laps may not be tack welded together for
	assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of
	AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design
	Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the
	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012
	Bridge Design Guide Section 5.11.6.2. For deformed billet-steel bars, the overlap shall meet the
	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. The spacing center-to-
	center of the wire fabric sheet shall not be less than 2 inches or more than 8 inches.
	of the more short shall not be loss than 2 mones of more than 6 mones.

Subsection:	615.08.01 Type of Test Specimen.
Revision:	Replace the subsection with the following:
	Start-up slump, air content, unit weight, and temperature tests will be performed each day on the
	first batch of concrete. Acceptable start-up results are required for production of the first unit.
	After the first unit has been established, random acceptance testing is performed daily for each
	50 yd ³ (or fraction thereof). In addition to the slump, air content, unit weight, and temperature
	tests, a minimum of one set of cylinders shall be required each time plastic property testing is
	performed.
Subsection:	615.08.02 Compression Testing.
Revision:	Delete the second sentence.
Subsection:	615.08.04 Acceptability of Core Tests.
Revision:	Delete the entire subsection.
Subsection:	615.12 Inspection.
Revision:	Add the following sentences to the end of the subsection: Units will arrive at jobsite with the
	"Kentucky Oval" stamped on the unit which is an indication of acceptable inspection at the
	production facility. Units shall be inspected upon arrival for any evidence of damage resulting
	from transport to the jobsite.
Subsection:	701.04.16 Deduction for Pipe Deflection.
Revision:	Insert the following at the end of the paragraph:
	The section length is determined by the length of the pipe between joints where the failure
	occurred.
Subsection:	716.02.02 Paint.
Revision:	Replace sentence with the following: Conform to Section 821.
Subsection:	716.03 CONSTRUCTION.
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current
	interims,
	716.03.02 Lighting Standard Installation.
Revision:	Replace the second sentence with the following:
	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum
	of four feet from the front face of the guardrail to the front face of the pole base.
	716.03.02 Lighting Standard Installation.
Part:	A) Conventional Installation.
Revision:	Replace the third sentence with the following: Orient the transformer base so the door is
	positioned on the side away from on-coming traffic.
	716.03.02 Lighting Standard Installation.
Part:	A) Conventional Installation.
Number:	1) Breakaway Installation and Requirements.
Revision:	Replace the first sentence with the following: For breakaway supports, conform to Section 12 of
	the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires,
G 1	and Traffic Signals, 2013-6th Edition with current interims.
	716.03.02 Lighting Standard Installation.
Part:	B) High Mast Installation
Revision:	Replace the first sentence with the following: Install each high mast pole as noted on plans.

Subsection: 716.03.02 Lighting Standard Installation.

Part: Number:

B) High Mast Installation 2) Concrete Base Installation

Revision: Modification of Chart and succeeding paragraphs within this section:

Drilled Shaft Depth Data							
_		3:1 Ground		2:1 Ground		1.5:1 Ground	
Level Ground		Slope		Slope		Slope (2)	
Soil	Rock	Soil	Rock	Soil	Rock	Soil	Rock
17 ft	7 f t	19 ft	7 f t	20 ft	7 f t	(1)	7 ft

Steel Requirements				
Vertical Bars Ties or Spiral				
Size			Spacing or	
Size	Total	Size	Pitch	
#10	16	#4	12 inch	

- (1): Shaft length is 22' for cohesive soil only. For cohesionless soil, contact geotechnical branch for design.
- (2): Do not construct high mast drilled shafts on ground slopes steeper than 1.5:1 without the approval of the Division of Traffic.

If rock is encountered during drilling operations and confirmed by the engineer to be of sound quality, the shaft is only required to be further advanced into the rock by the length of rock socket shown in the table. The total length of the shaft need not be longer than that of soil alone. Both longitudinal rebar length and number of ties or spiral length shall be adjusted accordingly.

If a shorter depth is desired for the drilled shaft, the contractor shall provide, for the state's review and approval, a detailed column design with individual site specific soil and rock analysis performed and approved by a Professional Engineer licensed in the Commonwealth of Kentucky.

Spiral reinforcement may be substituted for ties. If spiral reinforcement is used, one and onehalf closed coils shall be provided at the ends of each spiral unit. Subsurface conditions consisting of very soft clay or very loose saturated sand could result in soil parameters weaker than those assumed. Engineer shall consult with the geotechnical branch if such conditions are encountered.

The bottom of the drilled hole shall be firm and thoroughly cleaned so no loose or compressible materials are present at the time of the concrete placement. If the drilled hole contains standing water, the concrete shall be placed using a tremie to displace water. Continuous concrete flow will be required to insure full displacement of any water.

The reinforcement and anchor bolts shall be adequately supported in the proper positions so no movement occurs during concrete placement. Welding of anchor bolts to the reinforcing cage is unacceptable, templates shall be used. Exposed portions of the foundation shall be formed to create a smooth finished surface. All forming shall be removed upon completion of foundation construction.

Subsection: 716.03.03 Trenching.

Part:

A) Trenching of Conduit for Highmast Ducted Cables.

Revision:

Add the following after the first sentence: If depths greater than 24 inches are necessary, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes. No payment for additional junction boxes for greater depths will be allowed.

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	716.03.03 Trenching.			
Part:	B) Trenching of Conduit for Non-Highmast Cables.			
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary for			
	either situation listed previously, obtain the Engineer's approval and maintain the required			
	conduit depths coming into the junction boxes. No payment for additional junction boxes for			
	greater depths will be allowed.			
	716.03.10 Junction Boxes.			
Revision:	Replace subsection title with the following: Electrical Junction Box.			
	716.04.07 Pole with Secondary Control Equipment.			
Revision:	Replace the paragraph with the following:			
	The Department will measure the quantity as each individual unit furnished and installed. The			
	Department will not measure mounting the cabinet to the pole, backfilling, restoration, any			
	necessary hardware to anchor pole, or electrical inspection fees, and will consider them			
	incidental to this item of work. The Department will also not measure furnishing and installing			
	electrical service conductors, specified conduits, meter base, transformer, service panel, fused			
	cutout, fuses, lighting arrestors, photoelectrical control, circuit breaker, contactor, manual switch,			
	ground rods, and ground wires and will consider them incidental to this item of work.			
Subsection:	716.04.08 Lighting Control Equipment.			
Revision:	Replace the paragraph with the following:			
	The Department will measure the quantity as each individual unit furnished and installed. The			
	Department will not measure constructing the concrete base, excavation, backfilling, restoration,			
	any necessary anchors, or electrical inspection fees, and will consider them incidental to this item			
	of work. The Department will also not measure furnishing and installing electrical service			
	conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses,			
	lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground			
	rods, and ground wires and will consider them incidental to this item of work.			
Subsection:	716.04.09 Luminaire.			
Revision:	Replace the first sentence with the following:			
	The Department will measure the quantity as each individual unit furnished and installed.			
Subsection:	716.04.10 Fused Connector Kits.			
Revision:	Replace the first sentence with the following:			
	The Department will measure the quantity as each individual unit furnished and installed.			
Subsection:	716.04.13 Junction Box.			
Revision:	Replace the subsection title with the following: Electrical Junction Box Type Various.			
Subsection:	716.04.13 Junction Box.			
Part:	A) Junction Electrical.			
Revision:	Rename A) Junction Electrical to the following: A) Electrical Junction Box.			
Subsection:	716.04.14 Trenching and Backfilling.			
Revision:	Replace the second sentence with the following:			
	The Department will not measure excavation, backfilling, underground utility warning tape (if			
	required), the restoration of disturbed areas to original condition, and will consider them			
	incidental to this item of work.			
	mordental to this item of work.			

Subsection:	716.04.18 Remove Lighting.				
Revision:	Replace the paragraph with the following:				
Te vision.	The Department will measure the quantity as a lump sum for the removal of lighting equipment.				
	The Department will not measure the disposal of all equipment and materials off the project by				
	the contractor. The Department also will not measure the transportation of the materials and will				
	consider them incidental to this item of work.				
Subsection:	716.04.20 Bore and Jack Conduit.				
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linear				
	feet. This item shall include all work necessary for boring and installing conduit under an				
	existing roadway. Construction methods shall be in accordance with Sections 706.03.02,				
	paragraphs 1, 2, and 4.				
Subsection:	716.05 PAYMENT.				
Revision:	Replace items 04810-04811, 20391NS835 and, 20392NS835 under <u>Code</u> , <u>Pay Item</u> , and <u>Pay</u>				
	<u>Unit</u> with the following:				
	Code Pay Item Pay Unit				
	04810 Electrical Junction Box Each				
	04811 Electrical Junction Box Type B Each				
	20391NS835 Electrical Junction Box Type A Each				
	20392NS835 Electrical Junction Box Type C Each				
Subsection:	723.02.02 Paint.				
Revision:	Replace sentence with the following: Conform to Section 821.				
	723.03 CONSTRUCTION.				
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural				
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current				
~ -	interims,				
	723.03.02 Poles and Bases Installation.				
Revision:	Replace the first sentence with the following:				
	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum				
Cubaction	of four feet from the front face of the guardrail to the front face of the pole base.				
Subsection: Part:	723.03.02 Poles and Bases Installation.				
Revision:	A) Steel Strain and Mastarm Poles Installation Replace the second paragraph with the following: For concrete base installation, see Section				
IZCAISIOII:					
	716.03.02, B), 2), Paragraphs 2-7. Drilled shaft depth shall be based on the soil conditions				
Subsection:	encountered during drilling and slope condition at the site. Refer to the design chart below: 723.03.02 Poles and Bases Installation.				
Part:	B) Pedestal or Pedestal Post Installation.				
Revision:	Replace the fourth sentence of the paragraph with the following: For breakaway supports,				
ite (ibiUII)	conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for				
	Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.				
L	ingilway signs, Luminanes, and Traine signals, 2013-011 Edition with current interins.				

	723.03.03 Trenching.			
Part:	A) Under Roadway.			
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary,			
	obtain the Engineer's approval and maintain ether required conduit depths coming into the			
	junction boxes. No payment for additional junction boxes for greater depths will be allowed.			
Subsection:	723.03.11 Wiring Installation.			
Revision:	Add the following sentence between the fifth and sixth sentences: Provide an extra two feet of			
	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.			
Subsection:	723.03.12 Loop Installation.			
Revision:	Replace the fourth sentence of the 2nd paragraph with the following: Provide an extra two feet of			
	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.			
Subsection:	723.04.02 Junction Box.			
Revision:	Replace subsection title with the following: Electrical Junction Box Type Various.			
Subsection:	723.04.03 Trenching and Backfilling.			
Revision:	Replace the second sentence with the following: The Department will not measure excavation,			
	backfilling, underground utility warning tape (if required), the restoration of disturbed areas to			
	original condition, and will consider them incidental to this item of work.			
	723.04.10 Signal Pedestal.			
Revision:	Replace the second sentence with the following: The Department will not measure excavation,			
	concrete, reinforcing steel, specified conduits, fittings, ground rod, ground wire, backfilling,			
	restoring disturbed areas, or other necessary hardware and will consider them incidental to this			
	item of work.			
	723.04.15 Loop Saw Slot and Fill.			
Revision:	Replace the second sentence with the following: The Department will not measure sawing,			
	cleaning and filling induction loop saw slot, loop sealant, backer rod, and grout and will consider			
	them incidental to this item of work.			
	723.04.16 Pedestrian Detector.			
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each			
	individual unit furnished, installed and connected to pole/pedestal. The Department will not			
	measure installing R10-3e (with arrow) sign, furnishing and installing mounting hardware for			
Cubaatian	sign and will consider them incidental to this item of work.			
Subsection: Revision:	723.04.18 Signal Controller- Type 170. Replace the second sentence with the following: The Department will not measure constructing			
Kevisiuii:	the concrete base or mounting the cabinet to the pole, connecting the signal and detectors,			
	excavation, backfilling, restoration, any necessary pole mounting hardware, electric service, or			
	electrical inspection fees and will consider them incidental to this item of work. The Department			
	will also not measure furnishing and connecting the induction of loop amplifiers, pedestrian			
	isolators, load switches, model 400 modem card; furnishing and installing electrical service			
	conductors, specified conduits, anchors, meter base, fused cutout, fuses, ground rods, ground			
	wires and will consider them incidental to this item of work.			
	wites and will consider them incidental to ans item of work.			

Subsections	723.04.20 Install Signal Controller - Type 170.				
	Replace the paragraph with the following: The Department will measure the quantity as each				
Revision:					
	individual unit installed. The Department will not measure constructing the concrete base or				
	mounting the cabinet to the pole, connecting the signal and detectors, and excavation,				
	backfilling, restoration, any necessary pole mounting hardware, electric service, or electrical				
	inspection fees and will consider them incidental to this item of work. The Department will also				
	not measure connecting the induction loop amplifiers, pedestrian, isolators, load switches, model				
	400 modem card; furnishing and installing electrical service conductors, specified conduits,				
	anchors, meter base, fused cutout, fuses, ground rods, ground wires and will consider them				
	incidental to this item of work.				
Subsection:	723.04.22 Remove Signal Equipment.				
Revision:	Replace the paragraph with the following: The Department will measure the quantity as a lump				
	sum removal of signal equipment. The Department will not measure the return of control				
	equipment and signal heads to the Department of Highways as directed by the District Traffic				
	Engineer. The Department also will not measure the transportation of materials of the disposal				
	of all other equipment and materials off the project by the contractor and will consider them				
	incidental to this item of work.				
Subsection:	723.04.28 Install Pedestrian Detector Audible.				
Revision:	Replace the second sentence with the following: The Department will not measure installing sign				
	R10-3e (with arrow) and will consider it incidental to this item of work.				
Subsection:	723.04.29 Audible Pedestrian Detector.				
Revision:	Replace the second sentence with the following: The Department will not measure furnishing				
	and installing the sign R10-3e (with arrow) and will consider it incidental to this item of work.				
Subsection:	723.04.30 Bore and Jack Conduit.				
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linear				
	feet. This item shall include all work necessary for boring and installing conduit under an				
	existing roadway. Construction methods shall be in accordance with Sections 706.03.02,				
	paragraphs 1, 2, and 4.				
Subsection:	723.04.31 Install Pedestrian Detector.				
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each				
	individual unit installed and connected to pole/pedestal. The Department will not measure				
	installing sign R 10-3e (with arrow) and will consider it incidental to this item of work.				
Subsection:	723.04.32 Install Mast Arm Pole.				
Revision:	Replace the second sentence with the following: The Department will not measure arms, signal				
	mounting brackets, anchor bolts, or any other necessary hardware and will consider them				
	incidental to this item of work.				
Subsection:	723.04.33 Pedestal Post.				
Revision:	Replace the second sentence with the following: The Department will not measure excavation,				
	concrete, reinforcing steel, anchor bolts, conduit, fittings, ground rod, ground wire, backfilling,				
	restoration, or any other necessary hardware and will consider them incidental to this item of				
	work.				

Subsoctions	722 04 26 Troff	io Signal Dala Paga			
	723.04.36 Traffic Signal Pole Base.				
Revision:	Replace the second sentence with the following: The Department will not measure excavation,				
	reinforcing steel, anchor bolts, specified conduits, ground rods, ground wires, backfilling, or restoration and will consider them incidental to this item of work.				
G. L					
		ll Signal Pedestal.			
Revision:		ond sentence with the following: The Department will not measure excavation,			
		rcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire,			
	_	oration, or any other necessary hardware and will consider them incidental to this			
	item of work.				
	723.04.38 Instal				
Revision:	-	ond sentence with the following: The Department will not measure excavation,			
		rcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire,			
	_	oration, or any other necessary hardware and will consider them incidental to this			
	item of work.				
	723.05 PAYME				
Revision:	1 -	4810-04811, 20391NS835 and, 20392NS835 under <u>Code</u> , <u>Pay Item</u> , and <u>Pay</u>			
	<u>Unit</u> with the fol	llowing:			
	Code	Pay Item Pay Unit			
	04810	Electrical Junction Box Each			
	04811	Electrical Junction Box Type B Each			
	20391NS835	Electrical Junction Box Type A Each			
	20392NS835	Electrical Junction Box Type C Each			
	804.01.02 Crush				
		ence of the section.			
	804.01.06 Slag.				
Revision:		and following sentence.			
		rnace slag sand where permitted. The Department will allow steel slag sand only			
	in asphalt surfac	11			
	804.04 Asphalt				
Revision:	-	section with the following:			
		crushed, conglomerate, or blast furnace slag sand, with the addition of filler as			
	T	eet gradation requirements. The Department will allow any combination of			
	natural, crushed, conglomerate or blast furnace slag sand when the combination is achieved using				
	cold feeds at the plant. The Engineer may allow other fine aggregates.				
		ral Requirements.			
Revision:		ond sentence of the paragraph with the following:			
	=	e material must have a minimum solubility of 99.0 percent when tested according			
	to AASHTO T	44 and PG 76-22 must exhibit a minimum recovery of 60 percent, with a J_{NR}			
	(nonrecoverable	e creep compliance) between 0.1 and 0.5, when tested according to AASHTO TP			
	70.				

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Subsection:	806.03.01 General Requirements.						
Table:	PG Binder Requirements and Price Adjustment Schedule						
	Replace the Elastic Recovery, % (3) (AASHTO T301) and all corresponding values in the table						
	with the following:						
	Test Specification 100% Pay 90% Pay 80% Pay 70% Pay 50% Pay 100% P						
	MSCR recovery, $\%^{(3)}$ 60 Min. ≥58 56 55 54 <53						
	(AASHTO TP 70)						
	806.03.01 General Requirements.						
	PG Binder Requirements and Price Adjustment Schedule						
Superscript:	(3)						
Revision:	Replace (3) with the following:						
	Perform testing at 64°C.						
Subsection:	813.04 Gray Iron Castings.						
Revision:	Replace the reference to "AASHTO M105" with "ASTM A48".						
Subsection:	813.09.02 High Strength Steel Bolts, Nuts, and Washers.						
Number:	A) Bolts.						
Revision:	Delete first paragraph and "Hardness Number" Table. Replace with the following:						
	A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as						
	applicable.						
Subsection:	814.04.02 Timber Guardrail Posts.						
Revision:	Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph						
	4.1".						
	814.04.02 Timber Guardrail Posts.						
Revision:	Replace the first sentence of the fourth paragraph with the following:						
	Use any of the species of wood for round or square posts covered under AWPA U1.						
	814.04.02 Timber Guardrail Posts.						
Revision:	Fourth paragraph, replace the reference to "AWPA C2" with "AWPA U1, Section B, Paragraph						
	4.1".						
	814.04.02 Timber Guardrail Posts.						
	Delete the second sentence of the fourth paragraph.						
	814.05.02 Composite Plastic.						
Revision:	1) Add the following to the beginning of the first paragraph: Select composite offset blocks						
	conforming to this section and assure blocks are from a manufacturer included on the						
	Department's List of Approved Materials.						
Cl4:	2) Delete the last paragraph of the subsection.						
	816.07.02 Wood Posts and Braces.						
Revision:	First paragraph, replace the reference to "AWPA C5" with "AWPA U1, Section B, Paragraph						
Subsection:	4.1".						
	816.07.02 Wood Posts and Braces.						
	Delete the second sentence of the first paragraph. 818.07 Preservative Treatment.						
vealent:	First paragraph, replace all references to "AWPA C14" with "AWPA U1, Section A".						

Subsection:	834.14 Lighting Poles.			
Revision:	Replace the first sentence with the following: Lighting pole design shall be in accordance with			
	loading and allowable stress requirements of the AASHTO Standard Specifications for Structural			
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current			
	interims, with the exception of the following: The Cabinet will waive the requirement stated in			
	the first sentence of Section 5.14.6.2 – Reinforced Holes and Cutouts for high mast poles (only).			
	The minimum diameter at the base of the pole shall be 22 inches for high mast poles (only).			
Subsection	834.14.03 High Mast Poles.			
Revision:	Remove the second and fourth sentence from the first paragraph.			
Subsection	834.14.03 High Mast Poles.			
Revision:	Replace the third paragraph with the following: Provide calculations and drawings that are			
	stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.			
	834.14.03 High Mast Poles.			
Revision:	Replace paragraph six with the following: Provide a pole section that conforms to ASTM A 595			
	grade A with a minimum yield strength of 55 KSI or ASTM A 572 with a minimum yield			
	strength of 55 KSI. Use tubes that are round or 16 sided with a four inch corner radius, have a			
	constant linear taper of .144 in/ft and contain only one longitudinal seam weld. Circumferential			
	welded tube butt splices and laminated tubes are not permitted. Provide pole sections that are			
	telescopically slip fit assembled in the field to facilitate inspection of interior surface welds and			
	the protective coating. The minimum length of the telescopic slip splices shall be 1.5 times the			
	inside diameter of the exposed end of the female section. Use longitudinal seam welds as			
	commended in Section 5.15 of the AASHTO 2013 Specifications. The thickness of the			
	transverse base shall not be less than 2 inches. Plates shall be integrally welded to the tubes with			
	a telescopic welded joint or a full penetration groove weld with backup bar. The handhole cover			
	shall be removable from the handhole frame. One the frame side opposite the hinge, provide a			
	mechanism on the handhole cover/frame to place the Department's standard padlock as specified			
	in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge			
	to secure the handhole cover to the frame which includes providing stainless steel wing nuts and			
	washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel			
	(ASTM A 153) and have a neoprene rubber gasket that is permanently secured to the handhole			
	frame to insure weather-tight protection. The hinge shall be manufactured from 7-guage stainless steel to provide adjustability to insure weather-tight fit for the cover. The minimum			
	clear distance between the transverse plate and the bottom opening of the handhole shall not be			
	less than the diameter of the bottom tube of the pole but needs to be at least 15 inches. Provide			
	products that are hot-dip galvanized to the requirements of either ASTM A123 (fabricated			
	products that are not-drip garvanized to the requirements of either ASTW A123 (fabricated products) or ASTM A 153 (hardware items).			
Subsection:	834.16 ANCHOR BOLTS.			
Revision:	Insert the following sentence at the beginning of the paragraph: The anchor bolt design shall			
	follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications.			

Subsection:	834.17.01 Conventional.			
Revision:	Add the following sentence after the second sentence: Provide a waterproof sticker mounted on			
	the bottom of the housing that is legible from the ground and indicates the wattage of the fixture			
	by providing the first two numbers of the wattage.			
Subsection:				
Revision:	Replace the last five sentences in the second paragraph with the following sentences:			
	Provide a cabinet door with a louvered air vent, filter-retaining brackets and an easy to clean			
	metal filter. Provide a cabinet door that is keyed with a factory installed standard no. 2 corbin			
	traffic control key. Provide a light fixture with switch and bulb. Use a 120-volt fixture and			
	utilize a L.E.D. bulb (equivalent to 60 watts minimum). Fixture shall be situated at or near the			
	top of the cabinet and illuminate the contents of the cabinet. Provide a 120 VAC GFI duplex			
	receptacle in the enclosure with a separate 20 amp breaker.			
Subsection:	835.07 Traffic Poles.			
Revision:	Replace the first sentence of the first paragraph with the following: Pole diameter and wall			
	thickness shall be calculated in accordance with the AASHTO Standard Specifications for			
	Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with			
	current interims.			
Subsection:	835.07 Traffic Poles.			
Revision:	*Replace the first sentence of the fourth paragraph with the following: Ensure transverse plates			
	have a thickness ≥ 2 inches.			
	*Add the following sentence to the end of the fourth paragraph: The bottom pole diameter shall			
	not be less than 16.25 inches.			
Subsection:	835.07 Traffic Poles.			
Revision:	Replace the third sentence of the fifth paragraph with the following: For anchor bolt design, pole			
	forces shall be positioned in such a manner to maximize the force on any individual anchor bolt			
	regardless of the actual anchor bolt orientation with the pole.			
Subsection:	835.07 Traffic Poles.			
Revision:	Replace the first and second sentence of the sixth paragraph with the following:			
	The pole handhole shall be 25 inches by 6.5 inches. The handhole cover shall be removable			
	from the handhole frame. On the frame side opposite the hinge, provide a mechanism on the			
	handhole cover/frame to place the Department's standard padlock as specified in Section 834.25.			
	The handhole frame shall have two stainless studs installed opposite the hinge to secure the			
	handhole cover to the frame which includes providing stainless steel wing nuts and washers. The			
	handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153) and			
	have a neoprene rubber gasket that is permanently secured to the handhole frame to insure			
	weather-tight protection. The hinge shall be manufactured from 7 gauge stainless steel to			
	provide adjustability to insure a weather-tight fit for the cover. The minimum clear distance			
	between the transverse plate and the bottom opening of the handhole shall not be less than the			
	diameter of the bottom tube but needs to be at least 12 inches.			

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	835.07 Traffic Poles.				
Revision:	*Replace the first sentence of the last paragraph with the following: Provide calculations and				
	drawings that are stamped by a Professional Engineer licensed in the Commonwealth of				
	Kentucky.				
	*Replace the third sentence of the last paragraph with the following: All tables referenced in				
	835.07 are found in the AASHTO Standard Specifications for Structural Supports for Highway				
	Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.				
	835.07.01 Steel Strain Poles.				
Revision:	Replace the second sentence of the second paragraph with the following:				
	The detailed analysis shall be certified by a Professional Engineer licensed in the Commonweal				
	of Kentucky.				
Subsection:	835.07.01 Steel Strain Poles.				
Revision:	Replace number 7. after the second paragraph with the following: 7. Fatigue calculations should				
	be shown for all fatigue related connections. Provide the corresponding detail, stress category				
	and example from table 11.9.3.1-1.				
Subsection:	835.07.02 Mast Arm Poles.				
Revision:	Replace the second sentence of the fourth paragraph with the following: The detailed analysis				
	shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.				
Subsection:	835.07.02 Mast Arm Poles.				
Revision:	Replace number 7) after the fourth paragraph with the following: 7) Fatigue calculations should				
	be shown for all fatigue related connections. Provide the corresponding detail, stress category				
	and example from table 11.9.3.1-1.				
Subsection:	835.07.03 Anchor Bolts.				
Revision:	Add the following to the end of the paragraph: There shall be two steel templates (one can be				
	used for the headed part of the anchor bolt when designed in this manner) provided per pole.				
	Templates shall be contained within a 26.5 inch diameter. All templates shall be fully galvanized				
	(ASTM A 153).				
Subsection:	835.16.05 Optical Units.				
Revision:	Replace the 3rd paragraph with the following:				
	The list of certified products can be found on the following website: http://www.intertek.com.				
Subsection:	835.19.01 Pedestrian Detector Body.				
Revision:	Replace the first sentence with the following: Provide a four holed pole mounted aluminum				
	rectangular housing that is compatible with the pedestrian detector.				
Subsection:	843.01.01 Geotextile Fabric.				
Table:	TYPE I FABRIC GEOTEXTILES FOR SLOPE PROTECTION AND CHANNEL LINING				
Revision:	Add the following to the chart:				
	Property Minimum Value ⁽¹⁾ Test Method				
	CBR Puncture (lbs) 494 ASTM D6241				
	Permittivity (1/s) 0.7 ASTM D4491				

Subsection:	843.01.01 Geotextile Fabric.				
Table:	TYPE II FABRIC GEOTEXTILES FOR UNDERDRAINS				
Revision:	Add the following to the chart:				
	Property Minimum Value ⁽¹⁾ Test Method				
	CBR Puncture (lbs)	210	ASTM D6241		
	Permittivity (1/s)	0.5	ASTM D4491		
Subsection:	843.01.01 Geotextile Fabri	c.			
Table:	TYPE III FABRIC GEOTI STABILIZATION	EXTILES FOR SUBGRADE OR EMBANKN	MENT		
Revision:	Add the following to the cl	nart:			
	<u>Property</u>	Minimum Value ⁽¹⁾	Test Method		
	CBR Puncture (lbs)	370	ASTM D6241		
	Permittivity (1/s)	0.05	ASTM D4491		
Subsection:	843.01.01 Geotextile Fabri	c.			
Table:	TYPE IV FABRIC GEOT	EXTILES FOR EMBANKMENT DRAINAG	E BLANKETS AND		
	PAVEMENT EDGE DRA	***			
Revision:	Add the following to the cl				
	<u>Property</u>	Minimum Value ⁽¹⁾	Test Method		
	CBR Puncture (lbs)	309	ASTM D6241		
	Permittivity (1/s)	0.5	ASTM D4491		
Subsection:	843.01.01 Geotextile Fabric.				
Table:	TYPE V HIGH STRENGTH GEOTEXTILE FABRIC				
Revision:	Make the following changes to the chart:				
	<u>Property</u>	Minimum Value ⁽¹⁾	Test Method		
	CBR Puncture (lbs)	618	ASTM D6241		
	Apparent Opening Size	U.S. #40 ⁽³⁾	ASTM D4751		
	(3) Maximum average roll v				

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SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

This Special Note will apply when indicated on the plans or in the proposal.

1.0 DESCRIPTION. Furnish, install, operate, and maintain variable message signs at the locations shown on the plans or designated by the Engineer. Remove and retain possession of variable message signs when they are no longer needed on the project.

2.0 MATERIALS.

2.1 General. Use LED Variable Message Signs Class I, II, or III, as appropriate, from the Department's List of Approved Materials.

Unclassified signs may be submitted for approval by the Engineer. The Engineer may require a daytime and nighttime demonstration. The Engineer will make a final decision within 30 days after all required information is received.

2.2 Sign and Controls. All signs must:

- Provide 3-line messages with each line being 8 characters long and at least 18 inches tall. Each character comprises 35 pixels.
- Provide at least 40 preprogrammed messages available for use at any time.
 Provide for quick and easy change of the displayed message; editing of the message; and additions of new messages.
- 3) Provide a controller consisting of:
 - a) Keyboard or keypad.
 - b) Readout that mimics the actual sign display. (When LCD or LCD type readout is used, include backlighting and heating or otherwise arrange for viewing in cold temperatures.)
 - c) Non-volatile memory or suitable memory with battery backup for storing pre-programmed messages.
 - d) Logic circuitry to control the sequence of messages and flash rate.
- 4) Provide a serial interface that is capable of supporting complete remote control ability through land line and cellular telephone operation. Include communication software capable of immediately updating the message, providing complete sign status, and allowing message library queries and updates.
- 5) Allow a single person easily to raise the sign to a satisfactory height above the pavement during use, and lower the sign during travel.
- Be Highway Orange on all exterior surfaces of the trailer, supports, and controller cabinet.
- 7) Provide operation in ambient temperatures from -30 to + 120 degrees Fahrenheit during snow, rain and other inclement weather.
- 8) Provide the driver board as part of a module. All modules are interchangeable, and have plug and socket arrangements for disconnection and reconnection. Printed circuit boards associated with driver boards have a conformable coating to protect against moisture.
- Provide a sign case sealed against rain, snow, dust, insects, etc. The lens is UV stabilized clear plastic (polycarbonate, acrylic, or other approved material) angled to prevent glare.
- 10) Provide a flat black UV protected coating on the sign hardware, character PCB, and appropriate lens areas.
- 11) Provide a photocell control to provide automatic dimming.

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- 12) Allow an on-off flashing sequence at an adjustable rate.
- 13) Provide a sight to aim the message.
- 14) Provide a LED display color of approximately 590 nm amber.
- 15) Provide a controller that is password protected.
- 16) Provide a security device that prevents unauthorized individuals from accessing the controller.
- 17) Provide the following 3-line messages preprogrammed and available for use when the sign unit begins operation:

 $/KEEP/RIGHT/\Rightarrow\Rightarrow\Rightarrow/$ /MIN/SPEED/**MPH/ /ICY/BRIDGE/AHEAD/ /ONE /KEEP/LEFT/< LANE/BRIDGE/AHEAD/ /LOOSE/GRAVEL/AHEAD/ /ROUGH/ROAD/AHEAD/ /RD WORK/NEXT/**MILES/ /MERGING/TRAFFIC/AHEAD/ /TWO WAY/TRAFFIC/AHEAD/ /NEXT/***/MILES/ /PAINT/CREW/AHEAD/ /HEAVY/TRAFFIC/AHEAD/ /REDUCE/SPEED/**MPH/ /SPEED/LIMIT/**MPH/ /BRIDGE/WORK/***0 FT/ /BUMP/AHEAD/ /MAX/SPEED/**MPH/ /TWO/WAY/TRAFFIC/ /SURVEY/PARTY/AHEAD/

> *Insert numerals as directed by the Engineer. Add other messages during the project when required by the Engineer.

2.3 Power.

- Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.
- **3.0 CONSTRUCTION.** Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

Maintain the sign in proper working order, including repair of any damage done by others, until completion of the project. When the sign becomes inoperative, immediately repair or replace the sign. Repetitive problems with the same unit will be cause for rejection and replacement.

Use only project related messages and messages directed by the Engineer, unnecessary messages lessen the impact of the sign. Ensure the message is displayed in either one or 2 phases with each phase having no more than 3 lines of text. When no message is needed, but it is necessary to know if the sign is operable, flash only a pixel.

When the sign is not needed, move it outside the clear zone or where the Engineer directs. Variable Message Signs are the property of the Contractor and shall be removed from the project when no longer needed. The Department will not assume ownership of these signs.

4.0 MEASUREMENT. The final quantity of Variable Message Sign will be

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the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

5.0 PAYMENT. The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain or replace the variable message signs. The Department will make payment for the completed and accepted quantities under the following:

CodePay ItemPay Unit02671Portable Changeable Message SignEach

Effective June 15, 2012

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 -- Revised May 1, 2012

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- Implementation of Clean Air Act and Federal Water Pollution Control Act
- Compliance with Governmentwide Suspension and Debarment Requirements
- Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- 2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federallyassisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency...
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- 4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

- This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.
- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

T h i s p r o v i s i o n i s applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification - First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180 and 1200. "First Tier Covered
 Transactions" refers to any covered transaction between a
 grantee or subgrantee of Federal funds and a participant (such
 as the prime or general contract). "Lower Tier Covered
 Transactions" refers to any covered transaction under a First
 Tier Covered Transaction (such as subcontracts). "First Tier
 Participant" refers to the participant who has entered into a
 covered transaction with a grantee or subgrantee of Federal
 funds (such as the prime or general contractor). "Lower Tier
 Participant" refers any participant who has entered into a
 covered transaction with a First Tier Participant or other Lower
 Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180 and 1200. You may contact the person to
 which this proposal is submitted for assistance in obtaining a
 copy of those regulations. "First Tier Covered Transactions"
 refers to any covered transaction between a grantee or
 subgrantee of Federal funds and a participant (such as the
 prime or general contract). "Lower Tier Covered Transactions"
 refers to any covered transaction under a First Tier Covered
 Transaction (such as subcontracts). "First Tier Participant"
 refers to the participant who has entered into a covered
 transaction with a grantee or subgrantee of Federal funds
 (such as the prime or general contractor). "Lower Tier
 Participant" refers any participant who has entered into a
 covered transaction with a First Tier Participant or other Lower
 Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

EMPLOYMENT REQUIREMENTS RELATING TO NONDISCRIMINATION OF EMPLOYEES (APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT

KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

- 1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.
- 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to

provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

REVISED: 12-3-92

Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts
 and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of
 Transportation, Federal Highway Administration, as they may be amended from time to time, which are
 herein incorporated by reference and made a part of this contract.
- 2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will_not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- 4. **Information and Reports:** The contractor will_provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (6) provides:

No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.

KRS 11A.040 (8) states:

A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

General Decision Number: KY160187 01/08/2016 KY187

Superseded General Decision Number: KY20150187

State: Kentucky

Construction Type: Highway

Counties: Adair, Barren, Bell, Breathitt, Casey, Clay, Clinton, Cumberland, Estill, Floyd, Garrard, Green, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lincoln, Magoffin, Martin, McCreary, Menifee, Metcalfe, Monroe, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Russell, Taylor, Wayne, Whitley and Wolfe Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date 0 01/08/2016

SUKY2015-047 10/20/2015

	Rates	Fringes
BOILERMAKER	.\$ 24.65	12.94
BRICKLAYER Bricklayer Stone Mason		8.50 8.50
CARPENTER Carpenter Piledriver		14.50 14.50
CEMENT MASON	.\$ 21.25	8.50
ELECTRICIAN Electrician Equipment Operator Groundsman Lineman	.\$ 26.90 .\$ 17.79 .\$ 30.09	10.55 10.31 8.51 10.94
When workmen are required to w	ork from bosum	chairs, trusses,

stacks, tanks, scaffolds, catwalks, radio and T.V. towers,

structural steel (open, unprotected, unfloored raw steel), and bridges or similar hazardous locations where workmen are subject to fall, except where using JLG's and bucket trucks up to 75 feet: Add 25% to workman's base rate for 50 to 75 feet, and add 50% to workman's base rate for over 75 feet.

LABORER

Group 1\$	21.80	12.36
Group 2\$	22.05	12.36
Group 3\$	22.10	12.36
Group 4\$	22.70	12.36

GROUP 1: Aging and Curing of Concrete (Any Mode or Method), Asbestos Abatement Worker, Asphalt Plant Laborers, Asphalt Laborers, Batch Truck Dumpers, Carpenter Tenders, Cement Mason Tenders, Cleaning of Machines, Concrete Laborers, Demolition Laborers, Dredging Laborers, Drill Tender, Environmental Laborer - Nuclear, Radiation, Toxic and Hazardous Waste - Level D, Flagmen, Grade Checkers, All Hand Digging and Hand Back Filling, Highway Marker Placers, Landscaping Laborers, Mesh Handlers and Placers, Puddler, Railroad Laborers, Rip-rap and Grouters, Right of Way Laborers, Sign, Guard Rail and Fence Installers (All Types), Signalmen, Sound Barrier Installer, Storm and Sanitary Sewer Laborers, Swampers, Truck Spotters and Dumpers, Wrecking of Concrete Forms, General Cleanup

GROUP 2: Batter Board Men (Sanitary and Storm Sewer),
Brickmason Tenders, Mortar Mixer Operator, Scaffold Builders,
Burner and Welder, Bushammers, Chain Saw Operator, Concrete
Saw Operators, Deckhand Scow Man, Dry Cement Handlers,
Environmental Laborers - Nuclear, Radiation, Toxic and
Hazardous Waste - Level C, Forklift Operators for Masonry,
Form Setters, Green Concrete Cutting, Hand Operated Grouter
and Grinder Machine Operator, Jack Hammers, Lead Paint
Abatement, Pavement Breakers, Paving Joint Machine, Pipe
Layers - Laser Operators (Non-metallic), Plastic Pipe Fusion,
Power Driven Georgia Buggy and Wheel Barrow, Power Post Hole
Diggers, Precast Manhole Setters, Walk-behind Tampers, Walkbehind Trenchers, Sand Blasters, Concrete Chippers, Surface
Grinders, Vibrator Operators, Wagon Drillers

GROUP 3: Air Track Driller (All Types), Asphalt Luteman and Rakers, Gunnite Nozzleman, Gunnite Operators and Mixers, Grout Pump Operator, Powderman and Blaster, Side Rail Setters, Rail Paved Ditches, Screw Operators, Tunnel Laborers (Free Air), Water Blasters

GROUP 4: Caisson Workers (Free Air), Cement Finishers, Environmental Laborer - Nuclear, Radiation, Toxic and Hazardous Waste - Level A and B, miners and Drillers (Free Air), Tunnel Blasters, and Tunnel Mockers (Free Air), Directional and Horizontal Boring, Air Track Drillers (All Types), Powder Man and Blasters, Troxler and Concrete Tester if Laborer is Utilized

PAINTER

All Excluding Bridges\$	19.92	9.57
Bridges\$	23.92	10.07

PLUMBER\$ 22.52	7.80
POWER EQUIPMENT OPERATOR:	
Group 1\$ 29.95	14.40
Group 2\$ 29.95	14.40
Group 3\$ 27.26	14.40
Group 4\$ 26.96	14.40
GROUP 1: Auto Patrol, Batcher Plant, Bituminou	
Way, Clamshell, Concrete Mixer (21 cu ft or ov	
Pump, Crane, Crusher Plant, Derrick, Derrick F	
and Trenching Machine, Dragline, Dredge Engine	
<pre>(regardless of ownership when used for hoistin material), Elevating Grader and all types of I</pre>	
Machine, Hoisting Engine, Locomotive, LeTourne	
Scoop, Bulldozer, Mechanic, Orangepeel Bucket,	-
Power Blade, Roller (Bituminous), Roller (Eart	
(Rock), Scarifier, Shovel, Tractor Shovel, Tru	
Point, Winch Truck, Push Dozer, Grout Pump, H:	igh Lift, Fork
Lift (regardless of lift height), all types of	
Multiple Operator, Core Drill, Tow or Push Boa	
Truck, Concrete Paver, Grade-All, Hoist, Hyste	
Pump, Pumpcrete, Ross Carrier, Sheepfoot, Side Valve Man, Rotary Drill, Power Generator, Mucl	
Rock Spreader attached to Equipment, Scoopmob	
Loader, Tower Cranes, (French, German and other	
Hydrocrane, Tugger, Backfiller Gurries, Self-	
Compactor, Self-Contained Hydraulic Percussion	
GROUP 2: All Air Compressors (200 cu ft/min or	
Bituminous Mixer, Concrete Mixer (21 cu. ft. o	=
Machine, Form Grader, Tractor (50 hp and over) Finish Machine, Outboard Motor Boat, Brakeman,	
Tender, Whirly Oiler, Tract-air, Road Widening	
Articulating Trucks	j ilenenel,
•	
GROUP 3: Greaser on Grease Facilities servicing	ng Heavy
Equipment	
GROUP 4: Bituminous Distributor, Cement Gun, (Conveyor Mud
Jack, Paving Joint Machine, Pump, Tamping Mach	
(under 50 hp), Vibrator, Oiler, Air Compressor	
ft per minute), Concrete Saw, Burlap and Curin	
Seeder, Power Form Handling Equipment, Deckhar	nd Oiler,
Hydraulic Post Driver	
SHEET METAL WORKER\$ 20.40	7.80
TRUCK DRIVER	
Driver (3 Tons and Over),	
Driver (Truck Mounted Rotary Drill)\$ 23.74	14.50
Driver (3 Tons and Under),	14.50
Tire Changer and Truck	
Mechanic Tender\$ 23.53	14.50
Driver (Semi-Trailer or	
Pole Trailer), Driver	
(Dump Truck, Tandem Axle),	14 50
Driver of Distributor\$ 23.40	14.50

Driver on Mixer Trucks

(All Types)\$ Driver on Pavement Breakers.\$ Driver, Euclid and Other Heavy Earth Moving		14.50 14.50
Equipment and Low Boy\$ Driver, Winch Truck and A- Frame when used in	24.31	14.50
Transporting Materials\$ Greaser on Greasing	23.30	14.50
Facilities\$	24.40	14.50
Truck Mechanic\$	23.50	14.50
Truck Tender and		
Warehouseman\$	23.20	14.50

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal

process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

These rates are listed pursuant to the Kentucky Determination No. CR-15-II- HWY dated July 20, 2015.

<u>NOTE:</u> Both Kentucky Determination No. CR-15-II-HWY and Federal Decision No. KY150187 apply to this project. Both sets of wage rates are included. If there is a difference in the two wages for the same classification, the Contractor is required to pay the higher of the two listed wages.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Director Division of Construction Procurement Frankfort, Kentucky 40622 502-564-3500

KENTUCKY LABOR CABINET PREVAILING WAGE DETERMINATION CURRENT REVISION HIGHWAY CONSTRUCTION LOCALITY NO. II

Determination No. CR-15-II-HWY

Project No. Highway

Date of Determination: July 20, 2015

This schedule of the prevailing rate of wages for Locality No. II including the counties of ADAIR, BARREN, BELL, BREATHITT, CASEY, CLAY, CLINTON, CUMBERLAND, ESTILL, FLOYD, GARRARD, GREEN, HARLAN, HART, JACKSON, JOHNSON, KNOTT, KNOX, LAUREL, LAWRENCE, LEE, LESLIE, LETCHER, LINCOLN, MCCREARY, MAGOFFIN, MARTIN, MENIFEE, METCALFE, MONROE, MORGAN, OWSLEY, PERRY, PIKE, POWELL, PULASKI, ROCKCASTLE, RUSSELL, TAYLOR, WAYNE, WHITLEY, and WOLFE has been determined in accordance with the provisions of KRS 337.505 to 337.550. This determination shall be referred to as Prevailing Wage Determination No. CR-15-II-HWY.

The following schedule of rates is to be used for highway construction projects advertised or awarded by the Kentucky Transportation Cabinet. This includes any contracts for the relocation of any utilities or other incidental construction projects advertised or awarded by public authorities as a result of the highway construction project.

Apprentices or trainees shall be permitted to work in accordance with Administrative Regulations. Copies of these regulations will be furnished upon request to any interested person.

Overtime is to be computed at not less than one and one-half (1 1/2) times the indicated BASE RATE for all hours worked in excess of eight (8) hours per day, or in excess of forty (40) hours per week. However, KRS 337.540 permits an employee and employer to agree, in writing, that the employee will be compensated at a straight time base rate for hours worked in excess of eight (8) hours in any one calendar day, but not more than ten (10) hours worked in any one calendar day, if such written agreement is prior to the over eight (8) hours in a calendar day actually being worked, or where provided for in a collective bargaining agreement. The fringe benefit rate is to be paid for each hour worked at a straight time rate for all hours worked. Fringe benefit amounts are applicable for all hours worked except when otherwise noted. Welders will receive rate for craft in which welding is incidental.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

Anthony Russell, Commissioner

Department of Workplace Standards

CLASSIFICATIONS	RATE AND FRINGE BENEFITS			
BOILERMAKERS:	BASE RATE \$24.65 FRINGE BENEFIT 12.94			
BRICKLAYERS:				
Bricklayers:	BASE RATE \$22.90 FRINGE BENEFITS 8.50			
Stone Mason:	BASE RATE \$21.50 FRINGE BENEFITS 8.50			
CARPENTERS:				
Carpenters:	BASE RATE \$24.90 FRINGE BENEFITS 14.50			
Piledrivers:	BASE RATE \$24.55 FRINGE BENEFITS 14.50			
CEMENT MASONS:	BASE RATE \$21.25 FRINGE BENEFITS 8.50			
ELECTRICIANS:	*BASE RATE \$29.36 FRINGE BENEFITS 10.55			
*When workmen are required to work from bosum chairs, trusses, st radio and T.V. towers, structural steel (open, unprotected, unfloored hazardous locations where workmen are subject to a direct fall, exce trucks up to 75 feet: Add 25% to workman's base rate for 50 to 75 feet.	raw steel), and bridges or similar pt where using JLG's and bucket			
LINEMAN:	*BASE RATE \$30.09 FRINGE BENEFITS 10.94			
EQUIPMENT OPERATOR:	*BASE RATE \$26.90 FRINGE BENEFITS 10.31			
GROUNDSMAN:	*BASE RATE \$17.79 FRINGE BENEFITS 8.51			
IRONWORKERS:	BASE RATE \$ 27.56			

FRINGE BENEFITS 20.57

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

LABORERS:

GROUP 1: Aging and curing of concrete (any mode or method), asbestos abatement worker, asphalt plant laborers, asphalt laborers; batch truck dumpers; carpenter tenders, cement mason tenders, cleaning of machines, concrete laborers, demolition laborers, dredging laborers, drill helper, environmental laborer - nuclear, radiation, toxic and hazardous waste – Level D, flagmen, grade checkers, all hand digging and hand back filling, highway marker placers, landscaping laborers, mesh handlers and placers, puddler, railroad laborers, rip-rap and grouters, right of way laborers, sign, guard rail and fence installers (all types), signalmen, sound barrier installer, storm and sanitary sewer laborers, swampers, truck spotters and dumpers, wrecking of concrete forms, general cleanup:

HEAVY & HIGHWAY

BASE RATE

\$21.80

FRINGE BENEFITS

12.36

GROUP 2: Batter board men (sanitary and storm sewer), brickmason tenders, mortar mixer operator, scaffold builders, burner and welder, bushammers, chain saw operator, concrete saw operators, deckhand scow man, dry cement handlers, environmental laborers — nuclear, radiation, toxic and hazardous waste — Level C, forklift operators for masonry, form setters, green concrete cutting, hand operated grouter and grinder machine operator, jack hammers, lead paint abatement, pavement breakers, paving joint machine, pipe layers — laser operators (non-metallic), plastic pipe fusion, power driven Georgia buggy and wheel barrow, power post hole diggers, precast manhole setters, walk-behind tampers, walk-behind trenchers, sand blasters, concrete chippers, surface grinders, vibrator operators, wagon drillers:

HEAVY & HIGHWAY

BASE RATE

\$22.05

FRINGE BENEFITS

12.36

GROUP 3: Air track driller (all types), asphalt luteman and rakersm gunnite nozzleman, gunnite operators and mixers, grout pump operator, powderman and blaster, side rail setters, rail paved ditches, screw operators, tunnel laborers (free air), and water blasters:

HEAVY & HIGHWAY

BASE RATE

\$22.10

FRINGE BENEFITS

12.36

GROUP 4: Caisson workers (free air), cement finishers, environmental laborer – nuclear, radiation, toxic and hazardous waste – Level A and B, miners and drillers (free air), tunnel blasters, and tunnel mockers (free air), directional and horizontal boring, air track drillers (all types), powder man and blasters, troxler and concrete tester if laborer is utilized:

HEAVY & HIGHWAY

BASE RATE

\$22.70

FRINGE BENEFITS

12.36

OPERATING ENGINEERS:

Group A-1:

NCCCO or OECP Certified; Crane, dragline, hoist (1 drum when used for stack or chimney construction or repair), hoisting engineer (2 or more drums), orangepeel, overhead crane, piledriver, truck crane, tower crane, hydraulic crane:

BASE RATE

\$31.08

FRINGE BENEFITS

14.40

CLASSIFICATIONS

RATE AND FRINGE BENEFITS

OPERATING ENGINEERS (CONTINUED):

Group A:

Auto patrol, batcher plant, bituminous paver, cable-way, clamshell, concrete mixer (21 cu. ft. or over), concrete pump, crane, crusher plant, derrick, derrick boat, ditching and trenching machine, dragline, dredge engineer, elevator (regardless of ownership when used for hoisting any building material), elevating grader and all types of loaders, hoe-type machine, hoisting engine, locomotive, LeTourneau or carry-all scoop, bulldozer, mechanic, orangepeel bucket, piledriver, power blade, roller (bituminous), roller (earth), roller (rock), scarifier, shovel, tractor shovel, truck crane, well points, winch truck, push dozer, grout pump, high lift, fork lift (regardless of lift height), all types of boom cats, multiple operator, core drill, tow or push boat, A-Frame winch truck, concrete paver, gradeall, hoist, hyster, material pump, pumpcrete, ross carrier, sheepfoot, sideboom, throttle-valve man, rotary drill, power generator, mucking machine, rock spreader attached to equipment, scoopmobile, KeCal loader, tower cranes (French, German and other types), hydrocrane, tugger, backfiller gurries, self-propelled compactor, self-contained hydraulic percussion drill:

BASE RATE \$29.95 FRINGE BENEFITS 14.40

Group B:

All air compressors (200 cu. ft. per min. or greater capacity), bituminous mixer, concrete mixer (under 21 cu. ft.), welding machine, form grader, tractor (50 H.P. and over), bull float, finish machine, outboard motor boat, brakeman, mechanic helper, whirly oiler, tractair and road widening trencher, articulating trucks:

BASE RATE \$27.26 FRINGE BENEFITS 14.40

Group B2:

Greaser on grease facilities servicing heavy equipment:

BASE RATE

\$27.68

FRINGE BENEFITS 14.40

Group C:

Bituminous distributor, cement gun, conveyor, mud jack, paving joint machine, pump, tamping machine, tractors (under 50 H.P.), vibrator, oiler, air compressors (under 200 cu. ft. per min. capacity), concrete saw, burlap and curing machine, hydro seeder, power form handling equipment, deckhand oiler, hydraulic post driver:

	BASE RATE FRINGE BENEFITS	\$26.96 14.40
PAINTERS: All Excluding Bridges:	BASE RATE FRINGE BENEFITS	\$19.92 9.57
Bridges:	BASE RATE FRINGE BENEFITS	\$23.92 10.07

CLASSIFICATIONS	RATE AND FRINGE BENEFITS
PLUMBERS:	BASE RATE \$22.52 FRINGE BENEFITS 7.80
SHEET METAL:	BASE RATE \$20.40 FRINGE BENEFITS 7.80
TRUCK DRIVERS:	
Truck helper and warehouseman:	BASE RATE \$23.20 FRINGE BENEFITS 14.50
Driver, winch truck and A-Frame when used in transporting materials:	BASE RATE \$23.30 — FRINGE BENEFITS 14.50
Driver, (semi-trailer or pole trailer), driver (dump truck, tandem axle), driver of distributor:	BASE RATE \$23.40 FRINGE BENEFITS 14.50
Driver on mixer trucks (all types):	BASE RATE \$23.45 FRINGE BENEFITS 14.50
Truck mechanic:	BASE RATE \$23.50 FRINGE BENEFITS 14.50
Driver (3 tons and under), tire changer and truck mechanic helper:	BASE RATE \$23.53 FRINGE BENEFITS 14.50
Driver on pavement breakers:	BASE RATE \$23.55 FRINGE BENEFITS 14.50
Driver (over 3 tons), driver (truck mounted rotary drill):	BASE RATE \$23.74 FRINGE BENEFITS 14.50
Driver, Euclid and other heavy earth moving equipment and Low Boy:	BASE RATE \$24.31 FRINGE BENEFITS 14.50
Greaser on greasing facilities:	BASE RATE \$24.40 FRINGE BENEFITS 14.50

Kentucky Determination No. CR-15-II-HWY dated July 20, 2015

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

These rates are listed pursuant to the Kentucky Determination No. CR-15-II-HWY dated July 20, 2015. Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U.S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contract or shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: **EMPLOYERS/EMPLOYEES**

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the numbers of hours worked in each classification at the prescribed hourly base rate. **OVERTIME:**

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wage. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or to the undersigned.

Director **Division of Construction Procurement** Frankfort, Kentucky 40622 502-564-3500

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (Executive Order 11246)

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY	GOALS FOR FEMALE
PARTICIPATION	PARTICIPATION IN
IN EACH TRADE	EACH TRADE
7.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

Evelyn Teague, Regional Director Office of Federal Contract Compliance Programs 61 Forsyth Street, SW, Suite 7B75 Atlanta, Georgia 30303-8609

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is Rockcastle County.

PART IV

INSURANCE

INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
 - a) \$100,000 Each Accident Bodily Injury
 - b) \$500,000 Policy limit Bodily Injury by Disease
 - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a) "policy contains no deductible clauses."
 - b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

PART V

BID ITEMS

161210

PROPOSAL BID ITEMS

Report Date 1/27/16

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Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	3,000.00	TON		\$	
0020	00100		ASPHALT SEAL AGGREGATE	221.00	TON		\$	
0030	00103		ASPHALT SEAL COAT	27.00	TON		\$	
0040	00190		LEVELING & WEDGING PG64-22	500.00	TON		\$	
0050	00214		CL3 ASPH BASE 1.00D PG64-22	42.00	TON		\$	
0060	00339		CL3 ASPH SURF 0.38D PG64-22	2,967.00	TON		\$	
0070	00342		CL4 ASPH SURF 0.38A PG76-22	4,108.00	TON		\$	
0800	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0090	02677		ASPHALT PAVE MILLING & TEXTURING	7,075.00	TON		\$	
0100	20757ED		PAVEMENT REPAIR (MINOR)	1,900.00	SQYD		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0110	01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	70.00	EACH		\$	
0120	02363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	1.00	EACH		\$	
0130	02367	GUARDRAIL END TREATMENT TYPE 1	1.00	EACH		\$	
0140	02369	GUARDRAIL END TREATMENT TYPE 2A	1.00	EACH		\$	
0150	02381	REMOVE GUARDRAIL	6,975.00	LF		\$	
0160	02387	GUARDRAIL CONNECTOR TO BRIDGE END TY A-1	1.00	EACH		\$	
0170	02562	TEMPORARY SIGNS	500.00	SQFT		\$	
0180	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0190	02671	PORTABLE CHANGEABLE MESSAGE SIGN	6.00	EACH		\$	
0200	02696	SHOULDER RUMBLE STRIPS-SAWED	24,898.00	LF		\$	
0210	02714	SHOULDERING	12,450.00	LF		\$	
0220	02775	ARROW PANEL	2.00	EACH		\$	
0230	06401	FLEXIBLE DELINEATOR POST-M/W	62.00	EACH		\$	
0240	06412	STEEL POST MILE MARKERS	4.00	EACH		\$	
0250	06511	PAVE STRIPING-TEMP PAINT-6 IN	70,000.00	LF		\$	
0260	06549	PAVE STRIPING-TEMP REM TAPE-B	5,000.00	LF		\$	
0270	06550	PAVE STRIPING-TEMP REM TAPE-W	15,000.00	LF		\$	
0280	06551	PAVE STRIPING-TEMP REM TAPE-Y	10,000.00	LF		\$	
0290	06556	PAVE STRIPING-DUR TY 1-6 IN W	2,541.00	LF		\$	
0300	06557	PAVE STRIPING-DUR TY 1-6 IN Y	1,694.00	LF		\$	
0310	06592	PAVEMENT MARKER TYPE V-B W/R	311.00	EACH		\$	
0320	06593	PAVEMENT MARKER TYPE V-B Y/R	311.00	EACH		\$	
0330	08100	CONCRETE-CLASS A	5.00	CUYD		\$	
0340	10020NS	FUEL ADJUSTMENT	11,013.00	DOLL	\$1.00	\$	\$11,013.00
0350	10030NS	ASPHALT ADJUSTMENT	27,660.00	DOLL	\$1.00	\$	\$27,660.00
0360	20071EC	JOINT ADHESIVE	24,900.00	LF		\$	
0370	21802EN	G/R STEEL W BEAM-S FACE (7 FT POST)	7,012.50	LF		\$	
0380	24189ER	DURABLE WATERBORNE MARKING-6 IN W	18,675.00	LF		\$	
0390	24190ER	DURABLE WATERBORNE MARKING-6 IN Y	12,450.00	LF		\$	

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PROPOSAL BID ITEMS

Report Date 1/27/16

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
			CLEAN					
0400	24543EC		(CULVERT PIPES TO BE LINED)	863.00	LF		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0410	00462	CULVERT PIPE-18 IN	54.00	LF		\$	
0420	01204	PIPE CULVERT HEADWALL-18 IN	1.00	EACH		\$	
0430	01480	CURB BOX INLET TYPE B	2.00	EACH		\$	
0440	01825	ISLAND CURB AND GUTTER	45.00	LF		\$	
0450	02220	FLOWABLE FILL	10.00	CUYD		\$	
0460	02237	DITCHING	6,225.00	LF		\$	
)470	02483	CHANNEL LINING CLASS II	300.00	TON		\$	
0480	02484	CHANNEL LINING CLASS III	100.00	TON		\$	
0490	05950	EROSION CONTROL BLANKET	100.00	SQYD		\$	
0500	06427	TRENCHING	1,040.00	LF		\$	
)510	20758ED	REMOVE AND RESET PERF PIPE HEADWALL	5.00	EACH		\$	
)520	21533EN	EMBANKMENT	25.00	CUYD		\$	
0530	21554EN	EXCAVATION	25.00	CUYD		\$	
0540	23143ED	KPDES PERMIT AND TEMP EROSION CONTROL	1.00	LS		\$	
0550	23479EC	CURE IN PLACE PIPE LINER-15 IN	484.00	LF		\$	
)5 6 0	23480EC	CURE IN PLACE PIPE LINER-18 IN	379.00	LF		\$	
0570	23484EC	PERFORM CIPP ACCEPTANCE TESTING	1.00	LS		\$	

Section: 0004 - BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0580	22983EN		EPOXY HEALER-SEALER	11,500.00	SQYD		\$	

Section: 0005 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP AMOUNT
0590	02568		MOBILIZATION	1.00	LS		\$
0600	02569		DEMOBILIZATION	1.00	LS		\$